

UD
161
M35
1909
c.3

MANUAL
FOR
PRIVATES OF INFANTRY
OF THE
ORGANIZED MILITIA OF THE
UNITED STATES

1909

U. S. WAR DEPARTMENT

Superseded by

DIVISION OF MILITIA AFFAIRS

later edition, 1914

Instruction Circular No. 1

MANUAL FOR PRIVATES OF INFANTRY

OF THE ORGANIZED MILITIA OF THE
UNITED STATES.

Compiled in the Division of Militia Affairs
under the direction of Col. E. M. WEAVER

General Staff Corps, U. S. A.

By Capt. M. C. KERTH

Twenty-third Infantry, U. S. A.

(D. M. A. 9635)



18255

Special Section

General Staff

GOVERNMENT PRINTING OFFICE

WASHINGTON

1909

PROPERTY OF US ARMY

UD161

M35

1909

C.3

83-101

18225

UJ
154
A1A3
(1909)

TABLE OF CONTENTS.

	Page
Enlistment, oath.....	4
Obedience.....	7
Loyalty.....	8
Discipline.....	9
Military courtesy.....	9
Salutes, out of ranks.....	10
Conversation, courtesies in.....	11
Rank and precedence.....	12
Regulations governing militia.....	13
Uniforms.....	14
Service kit.....	16
Rations.....	17
Rifle.....	21
Care of.....	22
Precautions.....	23
Firing.....	24
Advice to riflemen.....	41
Infantry drill regulations.....	43
Definitions.....	43
General principles.....	46
Extended order.....	48
School of the soldier.....	54
Instruction without arms.....	54
Setting up exercises.....	57
Steps and marching.....	60
Instruction with arms.....	63
Manual of arms.....	65
Instruction of the skirmisher.....	74

	Page.
Infantry drill regulations—Continued.	
School of the squad.....	76
Close order.....	76
Marchings.....	80
Turnings.....	83
To stack and take arms.....	85
Positions kneeling and lying down.....	86
Inspection of arms.....	88
Loadings and firings.....	88
Extended order.....	93
Pitching tents.....	98
Manual of bayonet exercises.....	105
Definitions.....	106
Instruction without the rifle.....	107
Instruction with the rifle.....	109
Practical bayonet fighting.....	119
Extracts from the Manual of Guard Duty.....	121
Rosters and detachments.....	121
The commanding officer.....	121
Commander of the guard.....	122
Sergeant of the guard.....	122
Corporal of the guard.....	123
Musician of the guard.....	128
Orderly for the commanding officer.....	129
Privates of the guard.....	130
Orders for sentinels on post.....	131
Orders for sentinels except those at the post of the guard.....	134
Orders for sentinels at the post of the guard.....	136
Compliments from sentinels.....	137
Compliments from guards.....	139
Special orders.....	141
Color line and sentinels.....	141
Supernumeraries.....	143
Prisoners.....	143
Special orders for sentinels in charge of prisoners.....	143
Guard patrols.....	144
Countersigns and paroles.....	145
Miscellaneous.....	145
Flags.....	146
Reveille and retreat gun.....	147

TABLE OF CONTENTS.**5**

	Page.
Marches-----	147
Patrols-----	149
Advance and rear guards-----	158
Outposts-----	160
Combat-----	162
Care of health-----	166
First-aid rules-----	170

MANUAL FOR PRIVATES OF INFANTRY

OF THE

ORGANIZED MILITIA OF THE UNITED STATES.

Every soldier on enlisting in the Regular Army takes upon himself the following obligation:

"And I do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America; that I will serve them honestly and faithfully against all their enemies whomsoever; and that I will obey the orders of the President of the United States, and the orders of the officers appointed over me according to the Rules and Articles of War."

Every soldier enlisting in the National Guard takes upon himself an obligation of a similar nature.

OBEDIENCE.

The very first paragraph in the Army Regulations reads:

"All persons in the military service are required to *obey strictly* and to *execute promptly* the lawful orders of their superiors."

Obedience is the first and last duty of a soldier. It is the foundation upon which all military efficiency is built. Without it an army becomes a mob, while with it a mob ceases to be a mob and becomes possessed of much of the power of an organized force. It is a quality that is demanded of every person in the army, from the highest to the lowest. Each enlisted man binds himself, by his enlistment oath, to obedience. Each officer, in accepting his commission, must take upon himself the same solemn obligation.

Obey strictly and execute promptly the lawful orders of your superiors. It is enough to know that the person giving the

order, whether he be an officer, a noncommissioned officer, or a private acting as such, is your lawful superior. You may not like him, you may not respect him, but you must respect his position and authority, and reflect honor and credit upon your self and your profession by yielding to all superiors that complete and unhesitating obedience which is the pleasure as well as the duty of every true soldier.

Orders must be *strictly* carried out. It is not sufficient to comply with only that part which suits you or which involves no work or danger or hardship. Nor is it proper or permissible, when you are ordered to do a thing in a certain way or to accomplish a work in a definitely prescribed manner, for you to obtain the same results by other methods.

Obedience must be *prompt and unquestioning*. When any soldier (and this word includes officers as well as enlisted men) receives an order, it is not for him to consider whether the order is a good one or not, whether it would have been better had such an order never been given, or whether the duty might be better performed by some one else, or at some other time, or in some other manner. His duty is, first, to understand just what the order requires, and, second, to proceed at once to carry out the order to the best of his ability.

LOYALTY.

But even with implicit obedience you may yet fail to measure up to that high standard of duty which is at once the pride and glory of every true soldier. Not until you carry out the desires and wishes of your superiors in a hearty, willing, and cheerful manner are you meeting all the requirements of your profession. For an order is but the will of your superior, however it may be expressed. Loyalty means that you are for your organization and its officers and noncommissioned officers—not against them; that you always extend your most earnest and hearty support to those in authority. No soldier is a loyal soldier who is a knocker, or a grumbler, or a shirker. Just one man of this class in a company breeds discontent and dissatisfaction among many others. You should, therefore, not only guard against doing such things yourself, but should discourage such actions among any of your comrades.

DISCIPLINE.

When, by long-continued drill and subordination, you have learned your duties, and obedience becomes second nature, you have acquired discipline. It can not be acquired in a day nor a month. It is a growth. It is the *habit of obedience*. To teach this habit of obedience is the main object of the close-order drill, and, if good results are to be expected, the greatest attention must be paid to even the smallest details. The company or squad must be formed promptly at the prescribed time—not a minute or even a second late. All must wear the exact uniform prescribed and in the exact manner prescribed. When at attention there must be no gazing about, no raising of hands, no chewing or spitting in ranks. The manual of arms and all movements must be executed absolutely as prescribed. A drill of this kind teaches discipline. A careless, sloppy drill breeds disobedience and insubordination.

MILITARY COURTESY.

In all walks of life men who are gentlemanly and of good breeding are always respectful and courteous to those about them. It helps to make life move along more smoothly. In civil life this courtesy is shown by the custom of tipping the hat to ladies, shaking hands with friends, and greeting persons with a nod or a friendly "Good morning," etc.

In the army courtesy is just as necessary, and for the same reasons. It helps to keep the great machine moving without friction.

"Courtesy among military men is indispensable to discipline; respect to superiors will not be confined to obedience on duty, but will be extended on all occasions." (Par. 4, Army Regulations, 1908.)

One method of extending this courtesy is by saluting. The regulations prescribe that—

(a) All soldiers (officers and enlisted men) must salute all colors and standards not cased.

(b) All officers must be saluted by those of less rank, and they must carefully return the salute.

When in ranks the question of what a private should do is simple—he obeys any command that is given. It is when out of ranks that a private must know how and when to salute.

SALUTES BY PRIVATES OF INFANTRY OUT OF RANKS.

Thirty paces or less is saluting distance; that is, salutes are not as a rule given at greater distances than about thirty paces.

Six paces is the distance at which the salute should be given if you are coming that near or nearer. If not coming within six paces, salute when you are at the nearest distance.

To salute the colors or standards, use the rifle salute if armed with the rifle; otherwise salute by uncovering, holding the hat or cap in the right hand opposite the left shoulder, right forearm against the breast.

The national flag and the regimental flag belonging to dismounted organizations of the army are called colors. Those belonging to mounted organizations are called standards. These are the only flags a soldier salutes, except the salute to the flag at retreat and the salute to the flag prescribed when on shipboard.

Whenever the "*Star Spangled Banner*" is played by the band on a formal occasion at a military station or camp, stand at attention while the band plays, but do not salute, except at retreat.

At retreat, stand at attention when the "*Star Spangled Banner*" or "*To the Colors*" is played, and at the last note salute (if armed with the rifle, the rifle salute; otherwise, the right hand salute). This salute is to the flag which has just been lowered from the flagstaff, and you should be facing toward it.

Salutes to officers. Keep the hand in the saluting position until the salute is returned, or the officer passes.

Salute officers whether they are in uniform or not.

Salute all officers of the Regular Army, the Navy, the Marine Corps, the Volunteers, and the Militia of the United States, and all officers of foreign armies, also your Commander in Chief.

Out of doors, if armed with the rifle, use the rifle salute, the piece being at the right shoulder; if not armed with the rifle, salute with the hand farthest from the officer; if mounted, salute with the right hand.

In doors, if armed with the rifle, salute from the order, or the trail. If armed with side arms, salute with the hand. (Side arms are weapons worn at the side, and include bayonets,

revolvers, sabers, or swords.) If not armed, stand at attention and uncover, but do not salute unless spoken to. When an officer enters a room or tent where there are soldiers, the command "Attention" is given by the first soldier who sees him, when all rise and stand at attention until the officer leaves. Soldiers at meals do not rise.

When holding conversation with an officer, whether you are indoors or out, or whether you are armed or not, always salute at the beginning of the conversation and again when it is finished. If mounted, always dismount before speaking to an officer not mounted.

Soldiers actually at work or engaged in athletic exercises do not salute unless spoken to.

When talking with an officer, always stand at attention. Salute any officer senior to him who passes, but do not salute any officer junior to him unless ordered to do so.

If an officer remains in your vicinity, salute him but once.

Prisoners are not permitted to salute; they merely come to attention if not actually at work.

Sentinels on post salute as prescribed in the Manual of Guard Duty.

Do not salute noncommissioned officers.

COURTESIES IN CONVERSATION.

In speaking to an officer, always stand at attention and use the word "Sir." Examples:

"Sir, Private Brown, Company B, reports as orderly."

"Sir, the first sergeant directed me to report to the captain."

(Question by an officer:) "To what company do you belong?"

(Answer:) "Company H, sir."

(Question by an officer:) "Has first call for drill sounded?"

(Answer:) "No, sir;" or "Yes, sir; it sounded about five minutes ago."

(Question by an officer:) "Can you tell me, please, where Major Smith's tent is?"

(Answer:) "Yes, sir; I'll take you to it."

Use the third person in speaking to an officer. Examples:

"Does the Lieutenant wish," etc.

"Did the Captain send for me?"

In delivering a message from one officer to another, always use the form similar to the following: "Lieutenant A presents his compliments to Captain B and states," etc. This form is not used when the person sending or receiving the message is an enlisted man.

In all official conversation, refer to other soldiers by their titles, thus: Colonel A, Sergeant B, Private C.

Never go to any officer to make a request or complaint without first asking permission to do so from the first sergeant.

RANK AND PRECEDENCE OF OFFICERS AND NONCOMMISSIONED OFFICERS.

The following are the grades of rank of officers and non-commissioned officers:

1. Lieutenant-general.
2. Major-general.
3. Brigadier-general.
4. Colonel.
5. Lieutenant-colonel.
6. Major.
7. Captain.
8. First lieutenant.
9. Second lieutenant.
10. Veterinarian, cavalry and field artillery.
11. Cadet.
12. (a) Sergeant-major, regimental; sergeant-major, senior grade, Coast Artillery Corps; (b) master electrician, Coast Artillery Corps; master signal electrician; (c) engineer, Coast Artillery Corps; (d) electrician sergeant, first class, Coast Artillery Corps.
13. Ordnance sergeant; post commissary-sergeant; post quartermaster-sergeant; sergeant, first class, Hospital Corps; first-class signal sergeant; electrician sergeant, second class, Coast Artillery Corps; master gunner, Coast Artillery Corps.
14. Quartermaster-sergeant and commissary-sergeant, regimental; chief musician.
15. Sergeant-major, squadron and battalion; sergeant-major, junior grade, Coast Artillery Corps; color sergeant; chief trumpeter; principal musician; battalion quartermaster-sergeant, engineers and field artillery.

16. First sergeant; drum major.
17. Sergeant; quartermaster-sergeant, company; stable sergeant.
18. (a) Corporal; (b) fireman, Coast Artillery Corps.

In each grade and subgrade, date of commission, appointment, or warrant determines the order of precedence.

The insignia of rank appearing on the shoulder straps, or shoulder loops of officers, are as follows:

General: Coat of arms and two stars.

Lieutenant-General: One large star and two smaller ones.

Major-general: Two silver stars.

Brigadier-general: One silver star.

Colonel: One silver spread eagle.

Lieutenant-colonel: One silver leaf.

Major: One gold leaf.

Captain: Two silver bars.

First lieutenant: One silver bar.

The grade of noncommissioned officers is indicated by chevrons worn on the sleeve.

RULES AND REGULATIONS, ETC.

The armies of the United States are governed by certain rules and regulations called "The Articles of War."

The Militia (National Guard) when called into the actual service of the United States shall be subject to the same rules and articles of war as the Regular troops of the United States.

When not in the actual service of the United States, the Militia is governed by such rules and regulations as may be prescribed by the State in which the Militia is organized.

The following list includes the offenses most often committed by soldiers, generally through ignorance or carelessness rather than viciousness. Violations of any rule or regulation should be carefully guarded against, since they not only subject the offender to punishment, but also bring discredit on his comrades, his organization, and on the military profession:

1. Selling, pawning, or, through neglect, losing or spoiling any government property, such as uniforms, blankets, equipment, ammunition, etc.

2. Disobedience of the orders of any officer or noncommissioned officer.

3. Disrespect to an officer or noncommissioned officer.
4. Absence from camp without leave.
5. Absence from any drill, formation, or other duty without authority.
6. Drunkenness on duty or off duty, whether in camp or when absent either with or without leave.
7. Bringing liquor into camp.
8. Noisy or disorderly conduct in camp or when absent either with or without leave.
9. Entering on private property, generally for the purpose of stealing fruit, etc.
10. Negligence or carelessness at drill or on other duty, particularly while on guard or as a sentinel over prisoners.
11. Wearing an unauthorized uniform or wearing the uniform in an improper manner.
12. Urinating in or around camp.
13. Failing to salute properly.
14. Disrespect or affront to a sentinel.

UNIFORMS.

Uniforms and clothing issued to enlisted men must not be sold, pawned, loaned, or given away, nor lost or damaged through neglect or carelessness. Any soldier who violates this rule may be tried by a military court and punished.

The *dress uniform* (the blue uniform) consists of the dress cap, dress coat, dress trousers, and black shoes. The straight, standing, military, white linen collar, showing no opening in front, is always worn with this uniform, with not to exceed one-half inch showing above the collar of the coat. Turn down, piccadilly, or roll collars are not authorized.

When under arms, white gloves, the russet leather belt, and cartridge box are worn.

The *full-dress uniform* is the same as the dress uniform, with the breast cord added.

With the dress or full-dress uniform a black tie is authorized, but it is not to be worn outside the opening of the collar of the coat. No tie is worn with the service uniform.

The *service uniform* is either olive drab or khaki.

For duty in the field it consists of the campaign hat, service coat, service breeches, leggings, russet leather or campaign

shoes. The olive drab shirt is always worn in the field with either the khaki or olive drab uniforms. Under arms the field belt is worn, but not white gloves.

When not in the field, the service cap is worn instead of the campaign hat. Under arms, white gloves, the russet leather belt, and cartridge box are worn.

Wear the exact uniform prescribed by your commanding officer, whether you are on duty or off duty.

Never wear a mixed uniform, as, for instance, a part of the olive drab with either the khaki or the blue uniform.

Never wear any part of the uniform with civilian clothes. It is very unsoldierly, for example, to wear a civilian overcoat over the uniform or to wear the uniform overcoat over a civilian suit.

Keep the uniform clean and neat and in good repair.

Grease spots and dust and dirt should be removed as soon as possible.

Rips and tears should be promptly mended.

Missing buttons and cap and collar ornaments should be promptly replaced.

There is but one correct and soldierly way to wear the cap. Never wear it on the back or side of the head.

The campaign hat should be worn in the regulation shape (creased without denting in the sides). Do not cover it with pen or pencil marks.

Never appear outside your room or tent with your blouse unbuttoned or collar unhooked. Chevrons, service stripes, and campaign medals and badges are a part of the uniform and must be worn as prescribed.

When blouses are not worn with the service uniform, olive-drab shirts are prescribed.

Suspenders must never be worn exposed to view.

Never appear in breeches without leggins.

Leather leggins should be kept polished. Canvas leggins should be scrubbed when dirty.

Black shoes should be kept shined. Russet-leather shoes should be kept polished, but the campaign shoe issued for field service should not be polished, but should be kept well oiled with neat's-foot oil.

The overcoat when worn must be buttoned throughout and the collar hooked.

THE SERVICE KIT.

(G. O. No. 23, War Department, 1906.)

The service kit is composed of two parts—(a) the field kit, which includes everything the soldier wears or carries with him in the field, and (b) the surplus kit, which is carried on the wagons.

The field kit consists of—

(a) The clothing worn on the person.

(b) Arms and equipment, consisting of—

1 United States magazine rifle, caliber .30.

1 bayonet.

1 bayonet scabbard.

1 gun sling.

1 rifle cartridge belt and fasteners.

1 pair rifle cartridge belt suspenders.

1 first-aid packet.

1 pouch for first-aid packet.

1 canteen.

1 canteen strap.

1 set blanket-roll straps.

1 haversack.

1 meat can.

1 cup.

1 knife.

1 fork.

1 spoon.

1 shelter tent half.

1 shelter tent pole.

5 shelter tent pins.

(c) Extra clothing, etc., consisting of—

1 blanket.

1 comb.

1 housewife.

1 poncho, rubber.

1 soap, cake.

1 stockings, pair.

1 toothbrush.

1 towel.

(d) Ammunition, consisting of—

90 rounds ball cartridges, caliber .30.

- (e) Rations for three days, consisting of—
 - 2 haversack rations (bacon, hard bread, coffee, sugar, pepper, and salt).
 - 1 emergency ration.
 - (f) Intrenching tools, consisting of—
 - 1 pick mattock
 - 3 intrenching tools } per squad.
- The surplus kit consists of—
- 1 drawers, pair.
 - 1 shoes, marching, pair.
 - 2 stockings, pair.
 - 1 undershirt.

THE RATION.

A ration is the allowance of food for one man for one day.

There are five kinds of rations issued, as follows:

(a) The garrison ration, which is issued to troops in a permanent garrison or camp.

(b) The field ration, which is issued to troops in the field and at temporary camps.

(c) The haversack ration, which is merely a reduced field ration issued when transportation is limited or when the ration has to be carried by the soldier. It consists of bacon, hard bread, coffee, sugar, salt, and pepper.

(d) The travel ration, which is issued to troops when traveling on trains, etc., and having no facilities for cooking.

(e) The emergency ration, which is issued to troops in the field, but which is not to be opened and used except by order of an officer, or in case of great necessity. It must not be used when other rations can be obtained.

Sometimes rations for several days are issued to the soldier at one time, and in such cases you should be very careful to so use the rations that they will last you the entire period. If you stuff yourself one day, or waste your rations, you will have to starve later on.

Generally the cooking for the company will be done by the company cook, but sometimes every soldier will have to prepare his own meals, using only his field mess kit for the purpose.

Remember that the best fire for individual cooking is a small, clear one, or, better yet, a few brisk coals. To make such a fire, first gather the fuel together and lay two small logs or stones in such a position as will support your meat cans. Then, between these, place a small handful of splinters or kindling and start the fire, gradually piling on the heavier wood as the fire grows.

The following recipes have been furnished from the office of the Commissary-General, United States Army:

Coffee.—Fill the tin cup two-thirds full of water and bring to a boil. Add one heaping spoonful of coffee and stir well, adding one spoonful of sugar if desired. Boil five minutes and then set it to the side of the fire to simmer for about ten minutes. Then, to clear the coffee, throw in a spoonful or two of cold water. This coffee is of medium strength and is within the limit of the ration if made but twice a day.

Cocoa.—Take two-thirds of a tin cupful of water, bring to a boil, add one heaping spoonful of cocoa, and stir until dissolved. Add one spoonful of sugar, if desired, and boil for five minutes.

Chocolate.—Take two-thirds of a tin cupful of water, bring to a boil, add a piece of chocolate about the size of a hickory nut, breaking or cutting it into small pieces and stirring until dissolved. Add one spoonful of sugar, if desired, and boil for five minutes.

Tea.—Take two-thirds of a tin cupful of water, bring to a boil, add one-half of a level spoonful of tea, and then let it stand or "draw" for three minutes. If allowed to stand longer, the tea will get bitter, unless separated from the tea leaves.

MEATS.

Bacon.—Cut slices about five to the inch, three of which should generally be sufficient for one man for one meal. Place in a mess pan with about one-half inch of cold water. Let come to a boil and then pour the water off. Fry over a brisk fire, turning the bacon once and quickly browning it. Remove the bacon to lid of mess pan, leaving the grease for frying potatoes, onions, rice, flapjacks, etc., according to recipe.

Fresh meat (to fry).—To fry, a small amount of grease (one to two spoonfuls) is necessary. Put grease in the mess pan

and let come to a smoking temperature, then drop in the steak and, if about one-half inch thick, let fry for about one minute before turning, depending upon whether it is desired it shall be rare, medium, or well done. Then turn and fry briskly as before. Salt and pepper to taste.

Applies to beef, veal, pork, mutton, venison, etc.

Fresh meat (to broil).—Cut in slices about one inch thick, from half as large as the hand to four times that size. Sharpen a stick or branch of convenient length—say, from two to four feet long—and weave the point of the stick through the steak several times, so that it may be readily turned over a few brisk coals or on the windward side of a small fire. Allow to brown nicely, turning frequently. Salt and pepper to taste. Meat with considerable fat is preferred, though any meat may be broiled in this manner.

Fresh meat (to stew).—Cut into chunks from one-half inch to one inch cubes. Fill cup about one-third full of meat and cover with about one inch of water. Let boil or simmer about one hour, or until tender. Add such fibrous vegetables as carrots, turnips, or cabbage, cut into small chunks, soon after the meat is put on to boil, and potatoes, onions, or other tender vegetables when the meat is about half done. Amount of vegetables to be added, about the same as meat, depending upon supply and taste. Salt and pepper to taste. Applies to all fresh meats and fowls. The proportion of meat and vegetables used varies with their abundance and fixed quantities can not be adhered to. Fresh fish can be handled as above, except that it is cooked much quicker, and potatoes and onions and canned corn are the only vegetables generally used with it, thus making a chowder. A slice of bacon would greatly improve the flavor. May be conveniently cooked in mess pan or tin cup.

VEGETABLES.

Potatoes (fried).—Take two medium-sized potatoes or one large one (about one-half pound), peel and cut into slices about one-fourth inch thick and scatter well in the mess pan in which the grease remains after frying the bacon. Add sufficient water to half cover the potatoes, cover with the lid to keep the moisture in, and let come to a boil for about fifteen to twenty minutes. Remove the cover and dry as desired.

Salt and pepper to taste. During the cooking the bacon already prepared may be kept on the cover, which is most conveniently placed bottom side up over the cooking vegetables.

Onions (fried).—Same as potatoes.

Potatoes (boiled).—Peel two medium-sized potatoes (about one-half pound) or one large one, and cut in coarse chunks of about the same size—say one and one-half inch cubes. Place in mess pan and three-fourths fill with water. Cover with lid and let boil or simmer for fifteen or twenty minutes. They are done when easily penetrated with a sharp stick. Pour off the water and let dry out for one or two minutes over hot ashes or light coals.

Potatoes (baked).—Take two medium-sized potatoes (about one-half pound) or one large one cut in half. Lay in a bed of light coals and cover with same and smother with ashes. Do not disturb for thirty or forty minutes, when they should be done.

Canned tomatoes.—One two-pound can is generally sufficient for five men.

Stew.—Pour into the mess pan one man's allowance of tomatoes and add about two large hardtacks broken into small pieces and let come to a boil. Add salt and pepper to taste, or add a pinch of salt and one-fourth spoonful of sugar.

Or, having fried the bacon, pour the tomatoes into the mess pan, the grease remaining, and add, if desired, two broken hardtacks. Set over a brisk fire and let come to a boil.

Or, heat the tomatoes just as they come from the can, adding two pinches of salt and one-half spoonful of sugar, if desired.

Or, especially in hot weather, eaten cold with hard bread, they are very palatable.

Rice.—Take about two-thirds of a tin cupful of water, bring to a boil, add four heaping spoonfuls of rice, and boil until the grains are soft enough to be easily mashed between the fingers (about twenty minutes). Add two pinches of salt and, after stirring, pour off the water and empty rice out on mess pan. Bacon grease goes good on rice, or sugar may be added.

Corn meal, fine hominy, oat meal.—Take about one-third of a tin cupful of water, bring to a boil, add four heaping spoonfuls of the meal or hominy, and boil about twenty minutes. Then add about two pinches of salt and stir well.

Dried beans and peas.—Put four heaping spoonfuls in about two-thirds of a tin cupful of water and boil until soft. This generally takes from three to four hours. Add one pinch of salt. About half an hour before the beans are done add one slice of bacon.

HOT BREADS.

Flap jack.—Take six spoonfuls of flour and one-third spoonful of baking powder and mix thoroughly (or dry mix in a large pan before issue, at the rate of twenty-five pounds of flour and three half cans of baking powder for one hundred men). Add sufficient cold water to make a batter that will drip freely from the spoon, adding a pinch of salt. Pour into the mess pan, which should contain the grease from fried bacon, or a spoonful of butter or fat, and place over medium hot coals, sufficient to bake so that in from five to seven minutes the flap jack may be turned by a quick toss of the pan. Fry from five to seven minutes longer, or until, by examination, it is found to be done.

Hoe cake.—Hoe cake is made exactly the same as flap jacks by substituting *corn meal* for *flour*.

Emergency rations.—Detailed instructions as to the manner of preparing the emergency ration are found on the label of each can. Remember that even a very limited amount of bacon, or hard bread, or both, consumed with the emergency ration, makes it far more palatable, and generally extends the period during which it can be consumed with relish. For this reason it would be better to husband the supply of hard bread and bacon for use with the emergency ration when it becomes evident that the latter must be consumed, rather than to retain the emergency ration to the last extremity and force its exclusive use for a longer period than two or three days.

THE RIFLE.

The rifle now used by the Regular Army and the Organized Militia is the United States magazine rifle, model of 1903, caliber .30.

It is 43.212 inches long and weighs 8.69 pounds.

The bayonet weighs 1 pound and the blade is 16 inches long.

The rifle is sighted for ranges up to 2,850 yards.

The rifle will shoot 5,464 yards (184 yards over 3 miles).

The accompanying plate shows the names of the principal parts of the rifle.

The only parts of the rifle that a private is permitted to take apart are the bolt mechanism and the magazine mechanism. Learn how to do this from your squad leader, for you must know how in order to keep your rifle clean. Never remove the hand guard or the trigger guard, nor take the sights apart unless you have special permission from a commissioned officer.

CARE OF THE RIFLE.

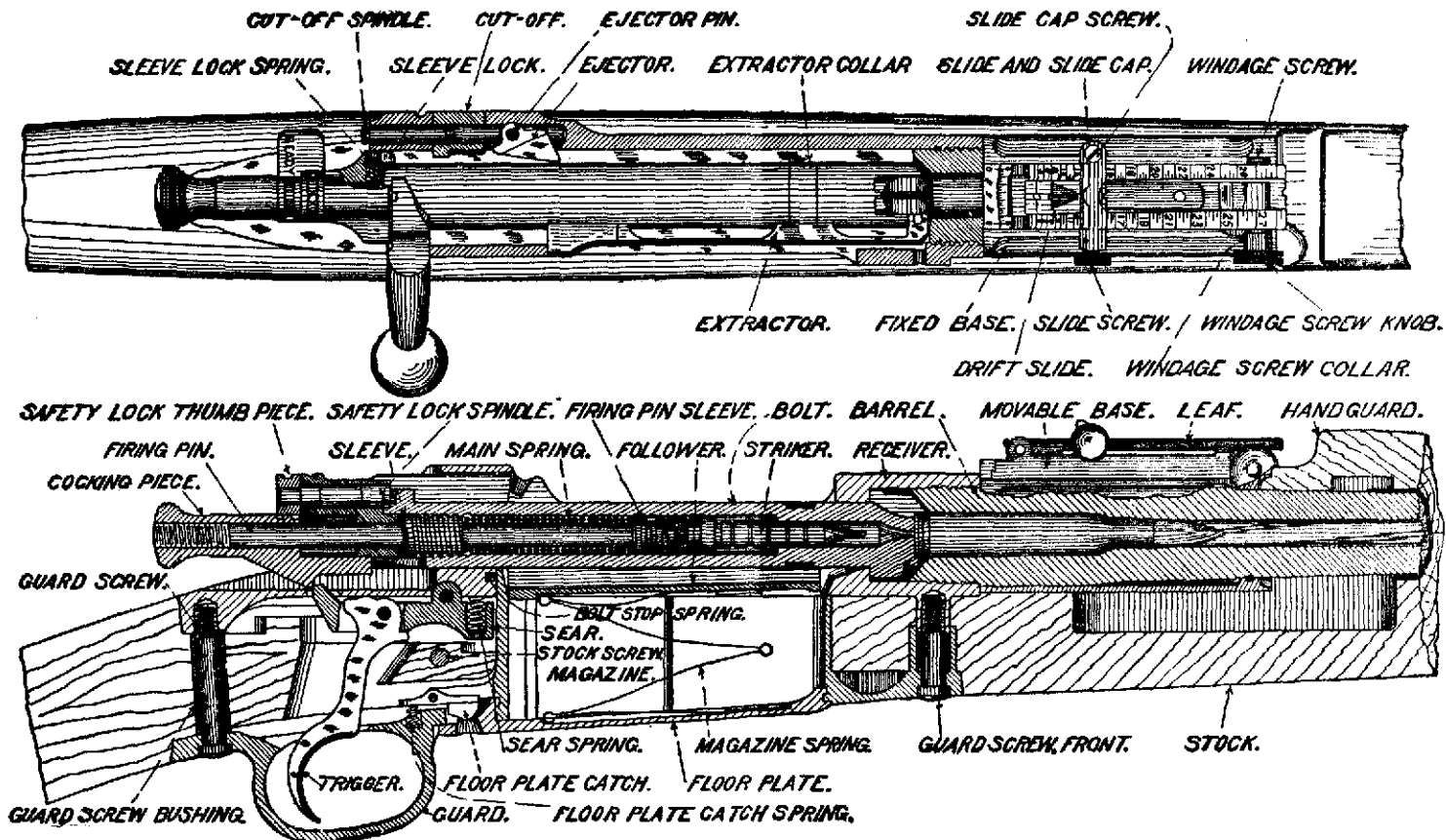
Every part of the rifle must be kept free from rust, dust, and dirt. *The most important part of the rifle to keep clean is the bore.* The least little rust or nick in the bore injures the accuracy of the gun. After firing smokeless powder, the gun should be cleaned as soon as possible or the bore will corrode. To clean the bore, remove the bolt and, if the fouling is dry, pour water into the chamber (water in which soda is dissolved is much better). With the cleaning rod, wipe out the bore with small pieces of cloth soaked in water or soda water. When using a cleaning rod always insert it at the breach, never at the muzzle, because *the muzzle is the most delicate part of the gun*, and a little nick or rust there affects the accuracy of the gun a great deal. When the bore is clean, wipe out, first with dry rags and then with an oiled rag. When no cleaning rods are at hand use the thong and brush, which should always be carried in the case in the butt of the rifle.

Take the bolt mechanism apart and clean each piece inside and out. Rub each with an oily rag before assembling.

Never attempt to polish any part that is blued. If rust appears, remove by rubbing with oil. Never use emery paper, pomade, or any preparation that cuts or scratches to clean any part of the rifle.

To beautify and preserve the stock rub with raw linseed oil. The use of any other preparation on the stock is strictly forbidden.

Wherever two metal surfaces rub together (all the cams and bearings) the same must always be kept oiled. Any part that may appear to move hard can generally be freed by the use of a little oil.



The best method of applying oil is to use a piece of cotton cloth upon which a few drops of oil have been placed. This method prevents the unnecessary waste of oil, which in the field is sometimes difficult to obtain. Too much oil on the rifle serves no useful purpose, but only serves to catch dust and dirt.

Sperm oil, carried in the oiler in the butt of the rifle, is to be used for oiling all bearings and cams.

Cosmoline, or cosmic, is used to oil the chamber and bore.

PRECAUTIONS.

Always handle your rifle with care. Don't throw it around as though it was a club. Don't stand it up against anything so that it rests against the front sight. Don't leave a stopper or a rag in the bore; it will cause rust to form at that point. It may also cause the gun barrel to burst if a shot is fired before removing it.

In coming to the "order arms," lower the piece *gently* to the ground.

When there is a cartridge in the chamber the piece is always carried locked. In this position the safety lock should be *kept* turned *fully* to the right, since if it be turned to the left nearly to the "ready" position and the trigger be pulled, the rifle will be discharged when the safety lock is turned to the "ready" position at any time later on.

Cartridges can not be loaded from the magazine unless the bolt is drawn fully to the rear. When the bolt is closed, or only partly open, the cut-off may be turned up or down as desired, but if the bolt is drawn fully to the rear, the magazine can not be cut off unless the top cartridge or the follower be pressed down slightly and the bolt be pushed forward so that the cut-off may be turned "off."

In the case of a misfire, don't open the bolt immediately, as it may be a hangfire. Misfires are often due to the fact that the bolt handle was not fully pressed down. Sometimes in pulling the trigger the soldier raises the bolt handle without knowing it.

Unless otherwise ordered, arms will be unloaded before being taken to quarters or tents, or as soon as the men using them are relieved from duty.

Keep the working parts oiled.

(In every company there should be at least one copy of the Manual of the Ordnance Department entitled "Description and Rules for the Management of the U. S. Magazine Rifle," latest edition, price 15 cents. This manual gives the name and a cut of every part of the rifle, explains its use, shows how to take the rifle apart and care for the same, and also gives much other valuable and interesting information.)

RIFLE FIRING.

Effective rifle fire is generally what counts most in battle. To have effective rifle fire, the men on the firing line must be able to HIT what they are ordered to shoot at. There is no man who can not be taught how to shoot. It is not necessary or even desirable to begin instruction by firing on a rifle range. A perfectly green recruit who has never fired a rifle may be made into a good shot by a little instruction and some preliminary drills and exercises in the armory.

(In every company there should be at least one copy of the Provisional Small-Arms Firing Manual, 1909, a government publication which can be obtained, like all other government publications, equipment, etc., through the adjutant-general of the State. This manual covers the whole subject of rifle firing in great detail. In the following discussion figures in parentheses refer to the page of this manual where the subject is more fully explained.)

The following is recommended as being a most systematic and progressive course for a recruit to follow in order to learn how to shoot a rifle to HIT:

First. Learn how to take your rifle apart, what the uses of the different parts are, and how to take care of the rifle.

Second. Learn how to use the rear sight. When the leaf is down, the sights are set for 530 yards. This is called the "battle sight" (7, 73, 94, etc.). Raise the leaf and note the markings thereon. The lines extending across one or both branches are 100-yard divisions. The figures indicate 100 yards and refer to the lines just below them. The short lines indicate divisions of 50 and 25 yards.

Problems.—Using the open sight, set your rear sight for 200 yards; 700 yards; 850 yards; 1,175 yards; 2,025 yards. Do the same thing, using the peep sight. Is there a line on the

sight to indicate 650 yards; 750 yards; 1,025 yards; 1,125 yards?

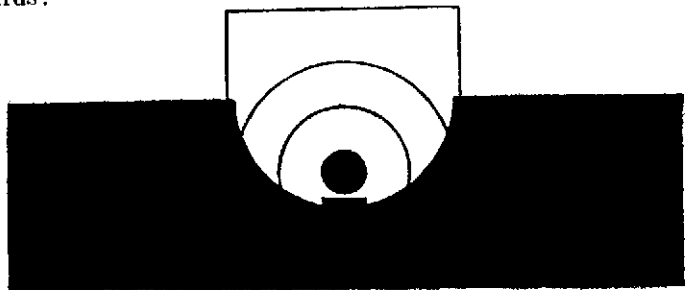


FIG. 1.

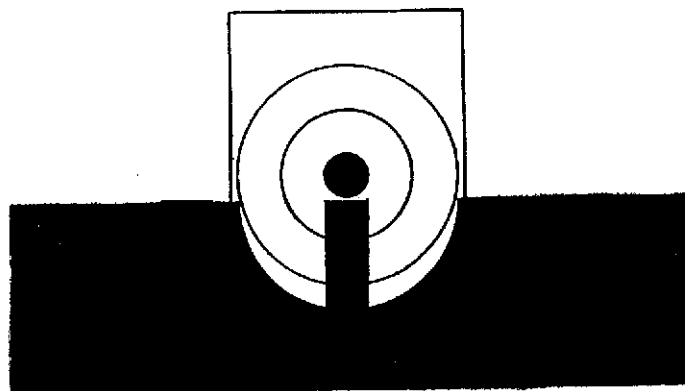


FIG. 2.

PLATE III.

Notice the wind gauge graduations on the movable base. When not firing, keep your windage at zero. Each division is called a point. If, when you turn the windage screw, the leaf moves to the right, you are taking windage to the right.

Problems.—Set your sight for no windage; for one point to the right; for two and one-half points to the left.

Third. Learn the different ways of sighting (27). (The use of a sighting bar is especially recommended for this purpose (24, 25).)

A fine sight—Figure 1, Plate III.

A half sight—Figure 2, Plate III.

A full sight—Figure 1, Plate IV.

A peep sight—Figure 2, Plate IV.

In the figures the round black spot is the bull's-eye, the vertical black column just below the bull's-eye is the front sight, and the rest of the black is the rear sight. The half circle cut out of the black represents the rear-sight notch. The circle cut out of the black square is the hole of the peep sight (27, 28, 29, 30).

Note this very carefully.—Whatever kind of sight is used you always aim just below the bull's-eye, so that there is a well-defined space between the bottom of the bull's-eye and the top of the front sight.

(There is a small instrument called an "aiming device" described on page 26 of the book *Description and Rules for the Management of the U. S. Magazine Rifle*. It can be quickly attached to the rifle, and by using it the instructor, standing to one side of the soldier, can see the reflection of the rear sight, the front sight, and the target, and he can therefore see just how the soldier is aiming. Each company of infantry is allowed four aiming devices.)

After you have learned the different kinds of sight, it is very necessary to adopt one kind of sight and then stick to it. When using the open sight (notch in rear sight) always use the half sight. There are a great many reasons why this is better than either the fine or the full sight (30).

In aiming the rifle, three points are brought in the same straight line, namely, the rear sight, the front sight, and the target. The eye can only be focused on one of these at a time and the other two will then appear somewhat blurred or indistinct. Try focusing the eye, first on the rear sight, then on the front sight, then on the target. The best results by far can be obtained by focusing the eye on the target. In other words, look at what you are shooting and don't think of the sights.

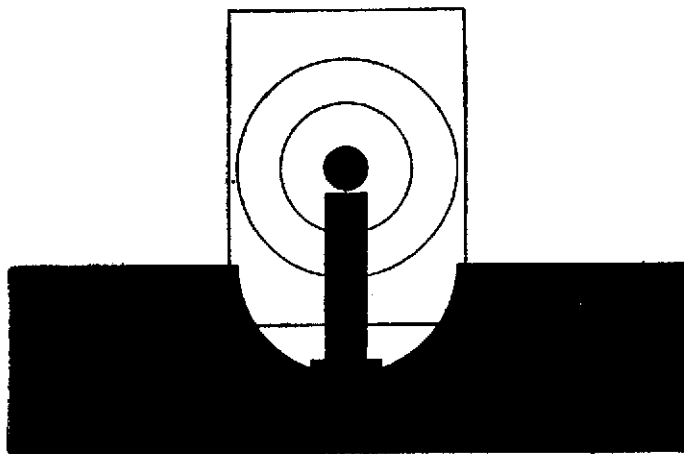


FIG. 1.

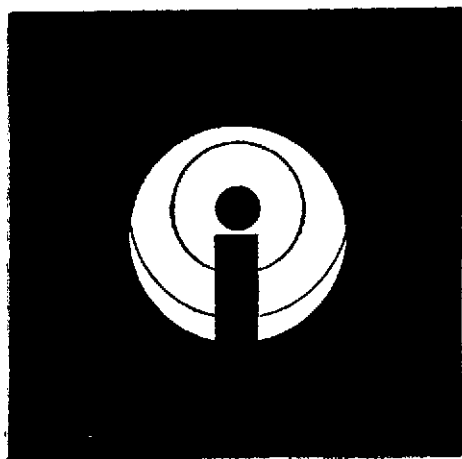


FIG 2
PLATE IV.

Fourth. *Sighting drills.*—Take an empty revolver-ammunition box or any similar well-made box, remove the top, and cut notches in the end to closely fit the rifle. (See Pl. II.)

Fill the box half full of sand and set it on the floor about 20 or 30 feet from the wall. Remove the gun sling from the

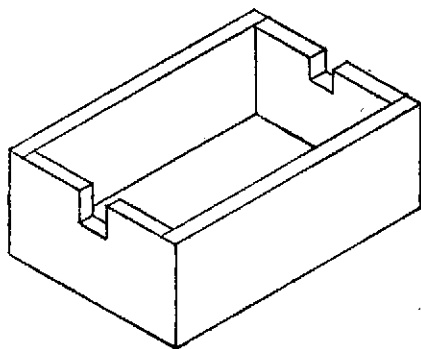
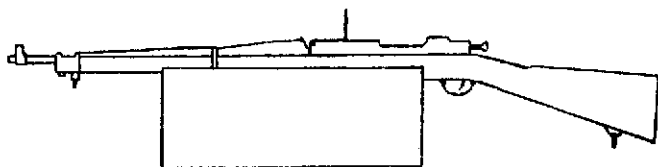


PLATE II.

rifle and set the rifle in the notches with the trigger guard close to and outside of the box. See that the rifle is not inclined to either side (canted). Now fasten a blank sheet of paper on the wall about 12 inches from the floor, so that the rifle points at about the middle of this sheet.

Cut out a round piece of white cardboard or stiff white paper about 3 or 4 inches across and stick a black target paster in the center (or a bull's-eye can be made of black ink). Prick a small hole through the center of the card. Fasten this disk to a small rod for a handle. You are now ready for some sighting exercises.

Take a prone position, elbows on the floor, hands supporting the head, and the eye the same distance from the rear sight as in shooting, without touching either the gun or the box. Take a half sight and direct someone (who acts as a marker) to move the disk along the sheet of paper on the wall until the bull's-eye is in the line of sight. You can direct the marker how to move the disk by calling out "up," "down," "right," "left." When the bull's-eye is in the right position call out "mark." The marker then carefully holds the disk in this position until an instructor verifies your sighting. (The disk may be fastened in position by sticking a pin through the hole in the center of the bull's-eye.) If an "aiming device" is on the gun, the instructor can coach you and others very much more rapidly.

Try the same exercise, using all the different kinds of sights, and setting the sights at different ranges.

Now comes an exercise which proves whether you know how to aim or not.

Aim as before, and, when the bull's-eye is just exactly right, call out "Mark." The marker being very careful not to move the disk, inserts a pencil point in the hole in the center of the disk, making a dot on the sheet of paper on the wall. Do this two more times, being careful not to move the gun or box and also to use the same kind of sight each time. Now connect the three dots thus made by lines so as to form a triangle. If the triangle is long up and down and narrow sideways (fig. 1, Pl. V), you have not taken the same amount of front sight each time. In other words, you may have used a fine sight once and a half or full sight the other times. Were you careful each time to have the same thin space between the top of the front sight and the bottom of the bull's-eye?

If the triangle is long sideways and narrow up and down (fig. 2, Pl. V), the errors were probably caused by not always sighting through the middle of the rear notch, or by sighting along the side of the front sight instead of along the top.

Practice this exercise until you make a very small triangle.



FIG. 1.

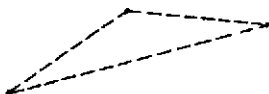


FIG. 2.

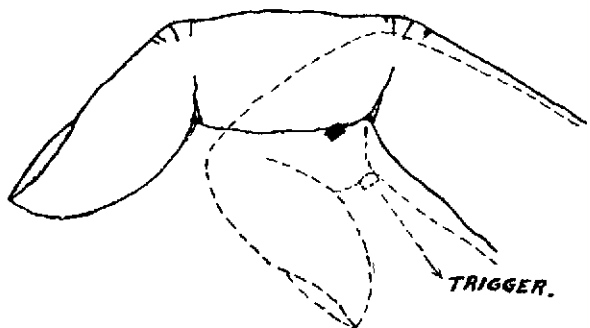


FIG. 3.

PLATE V.

When you can do this, it means you have learned how always to take the same kind of sight. You may, however, still be mak-

ing a constant error. To determine this, get some one who is a good rifle shot to take the same exercise. Then, without moving the rifle or box and using the same kind of sight as he did, you take the exercise.

If your triangle is small and over his, you are sighting correctly as well as uniformly.

If your triangle is above his, you have used a finer sight than he did; if below, a fuller sight.

If your triangle is to the right of his, you have probably sighted along the left of the rear sight notch or along the right of the front sight.

If your triangle is to the left of his, you have probably sighted along the right of the rear sight notch or along the left of the front sight.

If your triangle is above and to the right of his, you have combined the errors mentioned when the triangle was above with those mentioned when the triangle was to the right. In the same way you can tell the errors for any position.

Not until you can make a very small triangle on top of his do you sight correctly and uniformly.

After you aim correctly and uniformly try this exercise, using the battle sight, also the half sight and the peep sight at different ranges, and also taking two or three points of windage.

(Instructors should read carefully pages 17 to 63, Provisional Small-Arms Firing Manual, 1909.)

The sighting exercises may be conveniently conducted from a sitting or standing position by providing a good firm rest for the rifle at a suitable height.

Positions for firing.—When in ranks at close order the positions are those described in the Infantry Drill Regulations. When in extended order, or when firing alone, these positions may be modified somewhat to better suit the individual.

Standing position (Pars. 138, 139, p. 89).—The feet are placed in such a position as to give the greatest steadiness. Don't draw in the stomach. Don't lean backward, sticking the stomach out. The left arm is extended to suit the individual. Some men have it fully extended; others slide the left hand back to the trigger guard, the left elbow well under the rifle, the upper arm resting against the body (37-42).

Kneeling position (Par. 121, p. 86, and par. 139, p. 90).—The right foot may be placed in any position most comfortable and secure to the soldier. The position may be otherwise changed also, but unless the left elbow rests on the knee much of the steadiness of this position is lost (43).

Sitting position.—Sit down facing slightly to the right, the left leg directed to the front, right leg inclined toward the right, both heels, but not necessarily the bottom of the foot, on the ground, the right knee slightly higher than the left. The left elbow is rested on the left knee, the point of the elbow in front of the knee cap, and the right elbow against the left or inside of the right knee, the body inclined slightly forward. When on the ground, holes may be dug to more firmly support the heels. See that you have a good comfortable and steady position. This position may be modified to suit special requirements, but both elbows should be supported on the knees in order not to lose any of the advantages of steadiness thus gained (44).

Position lying down (par. 123, p. 86, and par. 139, p. 90).—The legs may be spread out and the toes turned out, or the legs may be crossed. The left elbow should be directly under or slightly to the right of the piece. Care must be taken that the butt is not brought against the collar bone. The right shoulder should be well raised. By moving it slightly to the front or rear and by moving the right elbow from or toward the body each soldier can determine for himself the position in which the shoulder gives the butt of the rifle the easiest rest. As most of the firing, both on the range and in actual war, is done from the prone position, you should make every effort to find one which does not cause you to be bruised from the recoil of the rifle and in which you can plainly see the target.

General remarks.—In all positions the butt must be pressed firmly but not too tightly against the hollow of the shoulder and not against the muscles of the upper arm. If held too tightly, the pulsations of the body will be communicated to the piece; if too loosely, the recoil will bruise the shoulder.

The entire surface of the butt should rest against the shoulder. If only the heel or the toe of the butt touches it, the recoil may throw the muzzle down or up, affecting the position of the hit.

While both arms are used to press the piece to the shoulder, the left arm is used mainly to direct the piece, and the right forefinger must be left free to squeeze the trigger. (Fig. 3, Pl. V.)

Sometimes when firing the recoil causes the right hand to strike the nose or mouth. This is due to a faulty position, and can generally be prevented by raising and moving forward slightly the right shoulder.

While coming to the position of aim, keep the eye fixed on the target and not on the front sight.

While aiming, draw and hold a moderately long breath. Do not fill the lungs as full as possible, and do not hold the breath so long as to lead to trembling (40, 41).

Do not include the gun sling in the grasp of the left hand.

The GUN SLING may be used at all ranges, subject only to the following conditions: Neither end shall have been passed through either sling swivel; no knot will be tied in the sling, and the sling itself must not be added to or modified in any manner (72).

The piece should be fired by a gradual pressure of the second joint of the first finger against the trigger (33, 41). *The trigger must be squeezed, not pulled or jerked.*

See that the rifle is *not canted* either to the right or left. Unless the sights are vertical, the bullet will go low and to the same side toward which the rifle is tilted (34).

Do not close the eye on firing, but continue looking toward the bull's-eye for an instant or more. In practicing aiming and snapping the piece at a bull's-eye, note particularly whether the aim is deranged on pulling the trigger; and if so, try to overcome this trouble. Probably you haven't *squeezed* the trigger.

Always *call your shot*; that is, state where you think you were aiming just as the gun was fired. Imagine the target to be marked like the face of a clock, the 12 being above the bull's-eye. Then a shot in the 4 ring just above the bull's-eye would be called "a 4 at 12 o'clock;" a shot in the 3 ring directly to the right of the bull's-eye would be "a 3 at 3 o'clock," etc. (83).

Flinching is caused by nervousness and is indicated in various ways, such as closing the eyes on firing, jerking the trigger, thrusting the shoulder forward to meet the recoil, etc. It is a bad habit, which must be cured as early as possible. It is generally due to a faulty position which was taken when first firing, and which resulted in a blow on the nose or injury to the shoulder or arm, caused by not holding the butt of the rifle in the right place or firmly enough. To cure this defect when firing on the range, let some one take your rifle and, without letting you know whether it is loaded or not, return it to you cocked and locked. Continue this until you overcome the habit of flinching (84).

Wind.—Wind affects the flight of the bullet, particularly at the longer ranges, sometimes causing the bullet to strike low, sometimes high, and sometimes to the right or left, depending on the direction of the wind. In order to indicate the direction from which the wind is blowing, imagine your watch laid down on the range before you with the 12 o'clock pointing toward the target. Consider the wind blowing toward the center of the watch. A wind blowing from the targets toward you would be a 12 o'clock wind; one blowing across the range from your right would be a 3 o'clock wind, etc. (55). You must learn to estimate the velocity of the wind and learn how to adjust your sights for the necessary corrections (56).

A 12 o'clock wind retards the bullet and causes it to strike low. Therefore, raise your sights.

A 6 o'clock wind causes the bullet to strike high. Therefore, lower your sights.

A 3 o'clock wind blows the bullet to the left of the target. Therefore, take windage to the right. Vice versa for a 9 o'clock wind.

Wind from any other direction affects both elevation and windage (56).

When firing on the range, an easy way to determine the amount of correction to be applied to the rear sight is to use the bull's-eye as a unit of measure. The following table shows the correction necessary to move the hit the width of the bull's-eye on the rectangular target corresponding to that range (57).

Range.	Elevation.	Windage.
<i>Yards.</i>	<i>Yards.</i>	<i>Points.</i>
200	100+	1
300	75	$\frac{1}{2}$
500	75	1
600	60	1—
800	60+	1+
1,000	36	1—

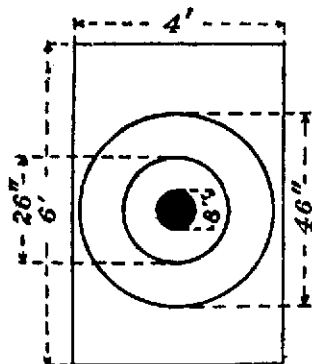
NOTE.—The sign + after a number in the above table indicates that the correction necessary is slightly more than that given; the sign —, that the correction necessary is slightly less than that given.

Always remember the bullet follows the movement of the rear sight.—If you raise the sight slide, the bullet will strike higher on the target; if you take less elevation, the bullet will strike lower; if you take windage to the right, the bullet will hit the target farther to the right; if you take windage to the left, the hit will be moved to the left.

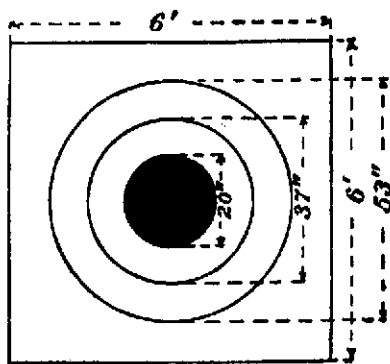
One point of windage moves the bullet 4 inches for every 100 yards on the range.

Range.	Change made by one point of windage.	Change made by raising or lowering sight 25 yards (approximate only).
<i>Yards.</i>	<i>Inches.</i>	<i>Inches.</i>
100	4	1
200	8	2
300	12	3
400	16	4
500	20	6
600	24	8
700	28	11
800	32	15
900	36	19
1,000	40	25
1,100	44	30
1,200	48	37

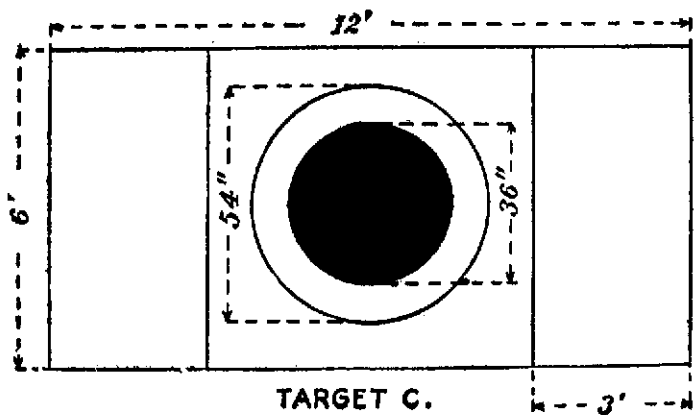
Problems.—You are firing at 200 yards at target A. Assume a hit on the target to represent a 4 at 12 o'clock. What correction would you make to cause the next shot to hit the bull's-



TARGET A.



TARGET B.

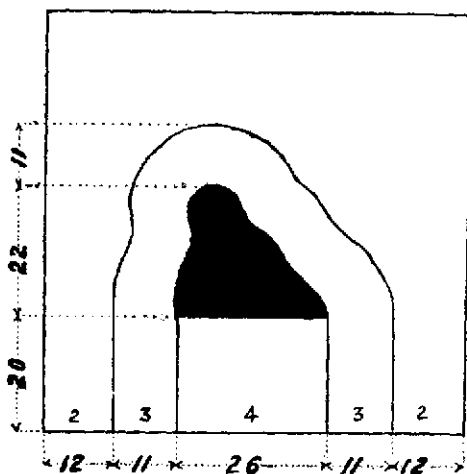


TARGET C.

eye? Do the same for a 3 at 6 o'clock; a 3 at 9 o'clock; a 2 at 3 o'clock; a 3 at 2 o'clock; a 4 at 5 o'clock; a 2 at 8 o'clock (use either table to solve these problems).

Solve the same problems for target A at 300 yards; for target B at 500 yards; for target B at 600 yards; for target C at 800 yards; for target C at 1,000 yards.

(Target A is used at 200 and 300 yards, target B at 500 and 600 yards, and target C at 800 and 1,000 yards, slow fire.



TARGET D.

Target D is used for rapid fire and for the skirmish run. In the skirmish run, however, only the 5's and 4's count. The 3's and 2's are scored as misses.)

Special Course C.—This course is prescribed for the use of the Organized Militia of the United States, as far as conditions will permit, and will be preceded by the preliminary instruction and drills prescribed in Part II, Provisional Small-Arms Firing Manual, 1909, using the methods and rules prescribed therein, as far as they are applicable.

Conditions and record of rifle firing in Special Course O required for qualification in the grades set forth below.

Marksman's record course.						Aggregates required to qualify in grades set forth below.			
Class of fire.	Ranges (yards).	Time limit.	Best scores not necessarily consecutive.	Positions.	Possible totals.	3d-class man.	2d-class man.	1st-class man.	Marksman.
Slow fire.	200	(*)	2	Standing.	50	All who make 45 in marksman's record course.	67	83	98
	300		2	Choice of kneeling or sitting.	50				
	500		2	Prona.	50				
	Total.....				150				

*Maximum of 1 minute per shot, time to be computed from full appearance of target to discharge of piece.

Conditions and record of rifle firing, etc.—Continued.

Sharpshooter's record course.						Aggregates required to qualify as sharpshooter.	
Class of fire.	Ranges (yards).	Time limit.	Best scores not necessarily consecutive.	Positions.	Best run.	Possible totals.	Sharpshooter.
Slow fire.	600	(*)	2	Prone.....	...	50	
Rapid fire.	200	20 secs. for each score.	2	Kneeling..	...	50	
Skirmish fire.			Shots.	Choice of prone, kneeling, or sitting.	One.	100	
	600	30 seconds.	2				
	500	30 seconds.	2				
	400	30 seconds.	3				
	350	30 seconds.	3				
	300	30 seconds.	5				
	200	20 seconds.	5				
Total.....						200	

*Maximum of 1 minute per shot, time to be computed from full appearance of target to discharge of piece.

Conditions and record of rifle firing, etc.—Continued.

Expert rifleman's course.						Aggregates required to qualify as expert rifleman.
Class of fire.	Ranges (yards).	Time limit.	Best scores not necessarily consecutive.	Position.	Possible totals.	Expert rifleman.
Slow fire.	800	None.	2	Prone.	50	Aggregates necessary for sharpshooter, and 40 at 800 yards, and 35 at 1,000 yards.
	1,000	None.	2		50	
	Total.....				100	

NOTE.—Fourth-class men are all who have not fired or who have fired and failed to qualify as third class or better.

Classification for Special Course C.—The class in firing to which any officer or soldier belongs will be determined at the end of the practice season from the aggregate of the total of the best two full scores of 5 shots each (not necessarily consecutive) that he has made on the range, as follows:

Fourth class.....All who have not fired or who have fired and failed to qualify as third class or better.

Third class.....All who have fired two or more full scores at 200, 300, and 500 yards, and from the best two have made an aggregate of 45 out of a possible 150.

Second class.....All who have fired two or more scores at 200, 300, and 500 yards, and from the best two have made a total of 67 out of a possible 150.

First class.....All who have fired two or more full scores at 200, 300, and 500 yards, and from the best two have made a total of 83 out of a possible 150.

- Marksmen**-----All who have fired two or more full scores at 200, 300, and 500 yards, and from the best two have made a total of 98 of a possible 150.
- Sharpshooters**-----All who have fired two or more full scores at 200, 300, and 500 yards, and from the best two scores at each range have made a total of at least 120; and have further fired two or more full scores at 600 yards, and from the best two scores at that range have made a total of at least 40; and have fired two or more full scores, rapid fire, at 200 yards (twenty seconds allowed for firing each score), and in the best two have made a total of 25; and have made one skirmish run of 20 shots, advancing from 600 to 200 yards; the total of all scores being not less than 235.
- Experts**-----All who have made the necessary total to qualify as sharpshooter and have fired two or more full scores at 800 and 1,000 yards, and from the best scores have made a total of 40 at 800 and 35 at 1,000 yards.

ADVICE TO RIFLEMEN.

Before going to the range clean the rifle carefully, removing every trace of oil from the bore. This can best be done with a rag saturated with gasoline. Put a light coat of oil on the bolt and cams. Blacken the front and rear sights with smoke from a burning candle or camphor or with liquid sight black.

Look through the bore and see that there is no obstruction in it.

Keep the rifle off the ground; the stock may absorb dampness, the sights may be injured, or the muzzle filled with dirt.

Watch your hold carefully and be sure to know where the line of sight is at discharge. It is only in this way that the habit of calling shots, which is essential to good shooting, can be acquired.

Study the conditions, adjust the sling, and set the sight before going to the firing point.

Look at the sight adjustment before each shot and see that it has not changed.

If sure of your hold and if the hit is not as called, determine and make the FULL correction in elevation and windage to put the next shot in the bull's eye.

Keep a written record of the weather conditions and the corresponding elevation and windage for each day's firing.

Less elevation will generally be required on hot days; on wet days; in a bright sunlight; with a 6 o'clock wind, or with a cold barrel.

More elevation will generally be required on cold days; on very dry days; with a 12 o'clock wind; with a hot barrel; in a dull or cloudy light.

The upper band should not be tight enough to bind the barrel.

Do not put a cartridge into the chamber until ready to fire. Do not place cartridges in the sun. They will get hot and shoot high.

Do not rub the eyes—especially the sighting eye.

In cold weather, warm the trigger hand before shooting.

After shooting, clean the rifle carefully and then oil it to prevent rust.

Have a strong, clean cloth that will not tear and jam, properly cut to size, for use in cleaning.

Always clean the rifle from the breech, using a brass cleaning rod when available. An injury to the rifling at the muzzle causes the piece to shoot very irregularly.

Regular physical exercise, taken systematically, will cause a marked improvement in shooting.

Frequent practice of the "Position and aiming drills" (36-48) is of the greatest help in preparing for shooting on the range.

EXTRACTS FROM THE INFANTRY DRILL REGULATIONS.

UNITED STATES ARMY.

DEFINITIONS.

Alignment: A straight line upon which several men or bodies of troops are formed, or are to be formed.

Base: The element on which a movement is regulated.

Center: The middle point or element of a command.

Column: A formation in which the elements are placed one behind another.

Deploy: To extend the front.

Depth: The space from head to rear of any formation, including the leading and rear elements.

Disposition: The distribution of the fractions of a body of troops, and the formations and duties assigned to each, for the accomplishment of a desired end.

Distance: Space in the direction of depth.

Drill: The exercises and evolutions taught on the drill ground.

Echelon: A formation in which the subdivisions are placed one behind another, extending beyond and unmasking one another, either wholly or in part.

In battle formation this term is also employed to designate the different lines. Example: The *first echelon*, the firing line; the *second echelon*, the support.

Element: A file, squad, platoon, company, or larger body.

Evolution: A movement executed by several battalions, or larger units, for the purpose of passing from one formation to another.

Facing Distance: Fourteen inches, *i. e.*, the difference between the front of a man in ranks including his interval, and his depth.

File: Two men, the front rank man and the corresponding man of the rear rank. The front rank man is the *file leader*. A file which has no rear rank man is a *blank file*. The term "files" applies also to individual men in single rank formation.

File Closers: Officers and noncommissioned officers posted in rear of the line.

Flank: The right or left of a command in line or column; also the element on the right or left of a line.

In speaking of the enemy, one says, "his right flank;" "his left wing," to indicate the flank or wing which the enemy would so designate.

Flank Attack: A movement made against the enemy's flank.

Flankers: Men so posted or marched as to protect the flank of a column.

Flank march: A march, whatever the formation, by which troops move along the front of the enemy's position.

Formation: Arrangement of the elements of a command. The placing of all fractions in their order in line, in column, or for battle.

Front: The space, in width, occupied by a command, either in line or column.

Front also denotes the direction of the enemy.

Guide: An officer, noncommissioned officer, or private, upon whom the command, or fraction thereof, regulates its march.

Head: The leading element of a column.

Interval: Space between elements of the same line.

Left: The left extremity or element of a body of troops.

Line: A formation in which the different elements are abreast of each other.

Maneuver: A movement made according to the nature of the ground with reference to the position and movements of the enemy.

Order, Close: The normal formation in which soldiers are regularly arranged in line or column.

Order, Extended: The formation in which the soldiers, or the subdivisions, or both, are separated by intervals greater than in close order.

Pace: Thirty inches; the length of the full step in quick time.

Ploy: To diminish front.

Point of Rest: The point at which a formation begins.

Rank: A line of men placed side by side.

Right: The right extremity or element of a body of troops.

Scouts: Men detailed to precede a command on the march and when forming for battle to gather and report information concerning the enemy and the nature of the ground.

Tactics: The art of handling troops in the presence of the enemy.

Turning Movement: An extended movement around the enemy's flank for the purpose of threatening or attacking his flank or rear.

Wing: The portion of a command from the center to the flank; the battalion is the smallest body which is divided into wings.

GENERAL PRINCIPLES.

1. In close order, all details, detachments and other bodies of troops are habitually formed in double rank.

The interval between men in a rank is 4 inches; the distance between ranks is 40 inches in both line and column.

The allowance for the front of a man is taken at about 26 inches, including the interval; the depth, about 12 inches.

To secure uniformity of interval between files when falling in and in alignments, each man places the palm of the left hand upon the hip, fingers pointing downward. In the first case the hand is dropped by the side when the man next on the left has his interval; in the second case, at the command *front*.

2. Distance is measured from the back of the man in front to the breast of the man in rear.

The distance between subdivisions in column is measured from guide to guide.

The distance between commands in column is measured from the rear guide of the preceding, to the leading guide of the following command.

3. The interval between men is measured from elbow to elbow; between companies, squads, etc., from the left elbow of the left man, or guide, of the group on the right to the right elbow of the right man, or guide, of the group on the left.

4. Movements that may be executed toward either flank are explained as toward but one flank, it being necessary to substitute the word "left" for "right," and the reverse, to have the explanation of the corresponding movement toward the other flank. The commands are given for the execution of the movements toward either flank. The substitute word of the command is placed within parentheses.

5. In movements in which the guide may be either right, left or center, it is indicated in the command thus: *Guide (right, left, or center)*.

6. Any movement may be executed either from the halt or when marching, if not otherwise prescribed.

7. Any movement not specially excepted may be executed in double time. If the movement be from the halt, or when marching in quick time, the command *double time* precedes the command *march*; if marching in double time, the command *double time* is omitted.

To hasten the execution of a movement begun in quick time, the command: 1. *Double time*, 2. *MARCH*, may be given; only those units that have not completed the movement take up the double time.

8. There are two kinds of commands:

The *preparatory* command, such as *forward*, indicates the movement that is to be executed.

The command of *execution*, such as *MARCH*, *HALT*, or *ARMS*, causes the execution.

Preparatory commands are distinguished by *italics*, those of *execution* by *CAPITALS*.

Where it is not mentioned in the text who gives the commands prescribed, they are to be given by the instructor.

The *preparatory* command should be given at such an interval of time before the command of execution as to admit of being properly understood; the command of *execution* should be given at the instant the movement is to commence.

The tone of command is animated, distinct, and of a loudness proportioned to the number of men under instruction.

Each *preparatory* command is enunciated distinctly and pronounced in an ascending tone of voice, but always in such manner that the command of *execution* may be more energetic and elevated.

The command of *execution* is firm in tone and brief.

When giving commands to troops it is usually best to face toward them.

Indifference in giving commands must be avoided, as it leads to laxity in execution. Commands should be given with spirit at all times.

9. To secure uniformity, officers and noncommissioned officers should be practiced in giving commands.

10. The signals and trumpet calls should be frequently used in instruction, in order that the officers and men may readily recognize them.

11. In the different schools, the posts of the officers and non-commissioned officers are specified, but as instructors they go wherever their presence is necessary. As file closers it is their duty to rectify mistakes and insure steadiness and promptness in the ranks.

12. To revoke a preparatory command, or, being at a halt, to begin anew a movement improperly begun, the instructor commands: **AS YOU WERE**, at which the movement ceases and the former position is resumed.

13. To stay the execution of a movement when marching, for the correction of errors, the instructor commands: 1. *In place*, 2. **HALT**, when all halt and stand fast. To resume the movement he commands: 1. *Resume*, 2. **MARCH**.

14. The instructor always maintains a military bearing, and by a quiet, firm demeanor sets a proper example to the men.

15. Short and frequent drills are preferable to long ones, which exhaust the attention.

EXTENDED ORDER.

16. Instruction in extended order, on account of its importance, is taken up as soon as recruits have had a few drills in close order. Movements including the normal attack are first taught on the drill ground with every attention to detail. The instruction is then taken up on varied ground.

The Extension.

17. Extended order may be taken up from any formation and the movements are executed in the most direct manner.

The deployment as skirmishers is made *forward* when in rear of the line to be occupied and *by the flank* when already on that line.

If at a halt and the deployment is to be *forward* the unit is first put in march. If marching and the deployment is to be *by the flank* the unit is first halted.

At extension the normal interval between squads is 15 paces; between skirmishers, 2 paces. If other intervals are desired they are specified in the commands for extension. These normal intervals are diminished if the line of squads or skirmishers of two adjacent organizations overlap.

The skirmishers close in during the advance to mid range, and upon arrival thereof the firing line contains about one man per yard of front. The intervals between companies are closed by the insertion of supports. Companies are kept together and moved as units as far as practicable.

For small commands, in which there is less danger of the line being pierced, it is not only allowable but preferable to extend with much greater intervals and to omit the closing in during the advance; the firing line, in such case, consisting of skirmishers at such interval as may be designated by the commander.

Instruction on Varied Ground.

18. In this instruction all movements are made with reference to an enemy in an indicated direction. The location is frequently changed, different positions of the enemy are assumed on the same ground and the movements conform to the accidents of the ground.

The enemy is said to be *imaginary* when his position and force are merely assumed; *outlined* when his position and force are indicated by a few men only; *represented* when a body of troops acts as such.

Commands and Signals.

19. Men in extended order fix their attention at the first word of command, the first note of the trumpet, or the first motion of the signal; the movement commences immediately upon the completion of the command, trumpet call, or signal.

The use of the trumpet to give commands to a fraction of a line is prohibited.

No commands for dressing are given in extended order; the general alignment is taken toward the base.

As far as practicable commands and cautions are replaced by signals and men are required to be on the alert to observe the signals of their leader.

In making signals the saber, rifle or headdress may be held in the hand; when the saber is used it is in prolongation of the arm.

The following signals are used alone or in conjunction with verbal commands or trumpet calls:

Attention: A short whistle.

Cease Firing: A prolonged whistle.

Except in these two cases the use of the whistle is prohibited.

Forward, Right oblique, Left oblique, By the right flank, By the left flank, To the rear: Raise the arm until horizontal, pointing in the desired direction; move in the desired direction.

To change direction to the right (left): Raise the left (right) arm until horizontal, extended toward the marching flank, carry the arm to the front; at the same time turn and move in the direction to be taken.

Halt: Raise the arm vertically to its full extent.

As skirmishers: Raise both arms until horizontal, extended laterally.

Assemble: Raise the arm vertically to its full extent and slowly describe small horizontal circles.

Rally: Raise the arm vertically to its full extent and describe large circles very rapidly.

The following signals are used by scouts and others to ask or transmit information.

Do you see anything? Wave the hand across the face.

Affirmative signal: Raise and lower the arm vertically twice.

Negative signal: Extend the arm horizontally twice.

Enemy in sight or hearing: Hold the rifle horizontally above the head; steadily if the enemy is in small bodies; raise and lower it in that position if he is in force.

To ask for reinforcements: Extend the arm horizontally and wave it rapidly with a circular motion.

Additional signals may be devised for use among men habitually acting as scouts.

Fire.

20. The commands for firing are the same as when in close order.

Firing with blank cartridges at an *outlined* or *represented* enemy at distances less than 100 yards is prohibited.

Volley firing, firing with counted cartridges, fire at will, and rapid fire are employed.

Volley firing is ordinarily limited to the defense and *fire of position* in the attack. In the latter case selected bodies of

troops in the supports and reserve fire over the heads of men in the firing line when the latter is on ground sufficiently lower than that occupied by the selected bodies to allow such fire to be used.

Fire with counted cartridges is used principally in the attack, and from the time of opening fire until mid range is reached.

Fire at will is used by the defense at nearly all stages of the action; in the attack, from the beginning of mid range to the place selected for delivering the assault.

Rapid fire is used at the decisive moment of the action, at about 200 yards from the enemy. At the command for rapid fire, bayonets are fixed, sights set at point blank, the men fire straight to the front and continue to fire until *cease firing* is given.

More than three volleys or three counted cartridges are rarely used without intermission; this to steady the men and prevent waste of ammunition.

When the supply of ammunition is ample and the enemy is in large bodies, volleys may be fired by the defense at extreme range.

Volleys by squads, as limited above, are used against troops in close order at distances not exceeding—

800 yards at a line equal to the front of a squad.

1,000 yards at a line equal to the front of a platoon.

1,200 yards at a line equal to the front of a company.

These limits are not invariable; they may be exceeded under favorable conditions of wind and light when the range is accurately known.

Ranges are classified as follows:

0 to 300 yards, short range.

300 to 600 yards, mid range.

600 to 1,000 yards, long range.

1,000 to 2,000 yards, extreme range.

Individual men acting beyond the immediate control of leaders do not fire at distances over—

400 yards at a man lying down.

500 yards at a man kneeling.

600 yards at a man standing.

700 yards at a man mounted.

800 yards at a squad or line of skirmishers.

Sharpshooters may, when permitted by an officer, fire at greater distances.

Fire Discipline.

21. Officers and noncommissioned officers exact from the men obedience to the following rules:

a. Never fire unless ordered.

b. Never exceed the number of cartridges indicated.

c. Never fire after the command or signal, *cease firing*.

d. Always fire at the named objective; if so situated as to be unable to see the objective, do not fire.

e. Always aim at the bottom line of the objective; if it be a line of men, aim at the feet; if a clump of trees, aim at the junction of tree trunks and ground.

Scouts, from the nature of their duties, are given greater latitude. They are permitted to carry their pieces loaded and at the ready, and the question of firing is left largely to their judgment. It is frequently necessary for them to fire in self-defense, to give the alarm, or to avail themselves of opportunity to fire upon leaders of the enemy.

Loadings and Firings.

22. Pieces are loaded prior to taking extended formation. From that time until the end of the battle, or exercise, the pieces are, or are supposed to be, kept loaded without formal command.

The firings are always executed at a halt.

In advancing to the attack skirmishers lie down on being halted. Those who can not see the objective rise to the kneeling or sitting position; and of these, those who can not see the objective rise to the standing position.

In rapid fire, skirmishers use positions giving greatest rapidity and accuracy of fire. They may be directed to kneel or rise before the commands for rapid fire are given.

Movement.

23. Skirmishers march at ease, carrying the piece in the most convenient manner with muzzle elevated.

A line of squads *advances, halts, moves to a flank or to the rear, turns, obliques, resumes the direct march, passes from quick to double time, and the reverse*, by the same commands and in a similar manner as a company in close order.

A line of skirmishers *advances, halts, moves by the flank or to the rear, turns, obliques, resumes the direct march, passes from quick to double time, and the reverse*, by the same commands and in a similar manner as a squad in close order; *skirmishers* is substituted for *squad* in the commands. If at a halt, the movement *by the flank or to the rear* is executed by the same commands as when marching.

The guide of a line in extended order is habitually center.

Marching by the flank in extended order is an exceptional movement; if under fire, it is not generally undertaken unless aided by the existence of cover.

After arriving within the zone of effective infantry fire the advance is made in double time if consistent with circumstances. When the troops are much fatigued or the ground is very difficult the gait is reduced.

The advance by alternate portions of the line is, if possible, made at a run.

The advance to the charge is made in double time; the charge, taken up at about 30 yards from the enemy, is, if possible, made at a run, the men shouting.

Halts.

24. On halting, skirmishers face to the front (direction of the enemy) in all cases.

Considerations governing halts are: 1st, effective fire upon the enemy; 2d, distances to be passed over; 3d, time and gaits required; 4th, cover. *All other considerations give way to those of effective fire.*

The distance between halts in the normal drill and on level ground is 50 yards. This distance, however, varies with the ground. Difficult ground and heavy fire reduce the distance.

SCHOOL OF THE SOLDIER.

25. Generally, sergeants and corporals are the instructors, under the supervision of an officer, but the captain occasionally requires the lieutenants to act as instructors.

26. The instructor briefly explains each movement, at first executing it himself if practicable.

He requires the recruits to take by themselves the proper positions and does not touch them for the purpose of correcting them, except when they are unable to correct themselves. He avoids keeping them too long at the same movement, although each should be understood before passing to another. He exacts by degrees the desired precision and uniformity.

27. As the instruction progresses the recruits are grouped according to proficiency, in order that all may advance as rapidly as their abilities permit. Those who lack aptitude and quickness are separated from the others and placed under experienced drillmasters.

INSTRUCTION WITHOUT ARMS.

28. A few recruits, usually not exceeding four, are placed in a single rank, facing to the front and about 4 inches apart, arranged according to height, the tallest man on the right.

29. To teach the recruits to assemble, the instructor requires them to place the palm of the left hand upon the hip, below the belt when worn; he then places them on the same line so that the right arm of each man rests lightly against the left elbow of the man next on his right, and then directs the left hands to be replaced by the side.

30. When the recruits have learned how to take their places, the instructor commands: **FALL IN.**

They assemble rapidly, as above prescribed, at attention, each man dropping the left hand as soon as the man next on his left has his interval.

Position of the Soldier, or Attention.

31. Heels on the same line and as near each other as the conformation of the man permits.

Feet turned out equally and forming with each other an angle of about sixty degrees.

Knees straight without stiffness.

Body erect on the hips, inclined a little forward; shoulders square and falling equally.

Arms and hands hanging naturally, backs of the hands outward; little fingers opposite the seams of the trousers; elbows near the body.

Head erect and square to the front, chin slightly drawn in without constraint, eyes straight to the front.

The Rests.

32. Being at a halt, the commands are: **FALL OUT; REST; AT EASE;** and, 1. **Parade,** 2. **REST.**

At the command *fall out*, the men may leave the ranks, but remain in the immediate vicinity. They resume their former places, at attention, at the command *fall in*.

At the command *rest*, each man keeps one foot in place, but is not required to preserve silence or immobility.

At the command *at ease*, each man keeps one foot in place and preserves silence, but not immobility.

1. **Parade,** 2. **REST.** Carry the right foot 6 inches straight to the rear, left knee slightly bent; clasp the hands, without constraint, in front of the center of the body, fingers joined, left hand uppermost, left thumb clasped by thumb and forefinger of right hand; preserve silence and steadiness of position.

33. To resume the attention: 1. **Squad,** 2. **ATTENTION.**

The men take the position of the soldier and fix their attention.

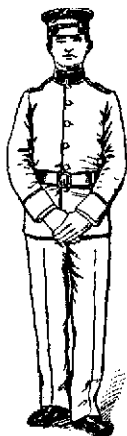
To Dismiss the Squad.

34. Being in line at a halt: **DISMISSED.**

Eyes Right or Left.

35. 1. **Eyes,** 2. **RIGHT (LEFT),** 3. **FRONT.**

At the command *right*, turn the head to the right so as to bring the left eye in a line about 2 inches to the right of the



Pl. 1, Par. 32

center of the body, eyes fixed on the line of eyes of the men in, or supposed to be in, the same rank.

At the command *front*, turn the head and eyes to the front.

Facings.

36. To the flank: 1. *Right (Left)*, 2. *FACE*.

Raise slightly the left heel and right toe, face to the right, turning on the right heel, assisted by a slight pressure on the ball of the left foot; place the left foot by the side of the right. Left face is executed on the left heel.

"To face in marching" and advance, turn on the ball of either foot and step off with the other foot in the new line of direction; to face in marching without gaining ground in the new direction, turn on the ball of either foot and mark time.

To the rear: 1. *About*, 2. *FACE*.

Raise slightly the left heel and right toe, face to the rear, turning to the right on the right heel and the ball of the left foot; replace the left foot by the side of the right.

Officers execute the about face as follows:

At the command *about*, carry the toe of the right foot about 8 inches to the rear and 3 inches to the left of the left heel without changing the position of the left foot.

At the command *face*, face to the rear, turning to the right on the left heel and right toe; replace the right heel by the side of the left.

Enlisted men out of ranks may use the about face prescribed for officers.

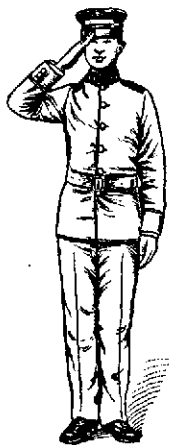
Salute with the Hand.

37. 1. *Right (Left) hand*, 2. *SALUTE*.

Raise the right hand smartly till the tip of forefinger touches the lower part of the head-dress (if uncovered, the forehead) above the right eye, thumb and fingers extended and joined, palm to the left, forearm inclined at about 45 degrees, hand and wrist straight. *(TWO)* Drop the arm smartly by the side.

The salute for officers is the same; the left hand is used only when the right is engaged. Officers and men, when saluting, look toward the person saluted.

For rules governing salutes, see Honors.



Pl. 2, Par. 37.

SETTING-UP EXERCISES.

38. All soldiers are regularly practiced in the following exercises, which may be supplemented by those in authorized calisthenic manuals.

The instructor places the men 3 paces apart.

In these exercises it is advisable to remove blouses and caps.

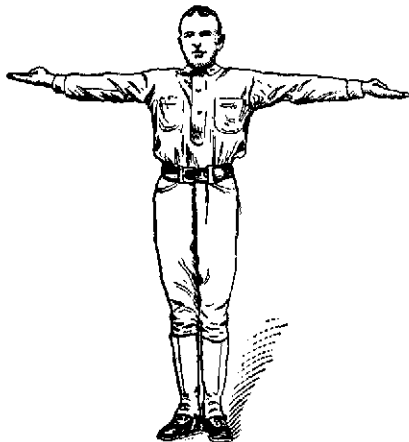
As soon as the exercises are well understood they may be continued without repeating the commands. For this purpose the instructor gives the commands as prescribed, then adds: *Continue the exercise*, upon which the motions to be repeated are continuously executed until the command *halt*.

At the command *halt*, given at any time, the position of the soldier is resumed.

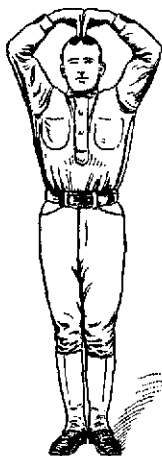
First Exercise.

1. *Arm*, 2. *EXERCISE*, 3. *HEAD*, 4. *UP*, 5. *DOWN*, 6. *RAISE*.

At the command *exercise*, raise the arms laterally until horizontal, palms upward. *HEAD*: Raise the arms in a circular direction over the



Pl. 3, Par. 38, 1 Ex.



Pl. 4, Par. 38, 1 Ex.



Pl. 5, Par. 38, 1 Ex.

head, tips of fingers touching top of the head, backs of fingers in contact their full length, thumbs pointing to the rear, elbows

pressed back. **UP:** Extend the arms upward their full length, palms touching. **DOWN:** Force the arms obliquely back and gradually let them fall by the sides. **RAISE:** Raise the arms laterally as prescribed for the second command. Continue by repeating *head, up, down, raise.*



Pl. 6, Par. 38,
2 Ex.

Second Exercise.

1. *Arms vertical, palms to the front*, 2. **RAISE**, 3. **DOWN**, 4. **UP**.

At the command *raise*, raise the arms laterally from the sides, extended to their full length, till the hands meet above the head, palms to the front, fingers pointing upward, thumbs locked, right thumb in front, shoulders pressed back. **DOWN:** Bend over till the hands, if possible, touch the ground, keeping the arms and knees straight. **UP:** Straighten the body and swing the extended arms (thumbs locked) to the vertical position. Continue by repeating *down, up.*



Pl. 7, Par. 38, 2 Ex.

Third Exercise.

1. *Arm*, 2. **EXERCISE**, 3. **FRONT**, 4. **REAR**.

At the command *exercise*, raise the arms laterally until horizontal, palms upward. **FRONT:** Swing the extended arms horizontally to the front, palms touching. **REAR:** Swing the extended arms well to the rear, inclining them slightly downward, raising the body upon the toes. Continue by repeating *front, rear*, till the men, if possible, are able to touch the backs of the hands behind the back.



Pl. 8, Par. 38, 3 Ex.

Fourth Exercise.

1. *Leg*, 2. **EXERCISE**, 3. **UP**.

At the command *exercise*, place the palms of the hands on the

hips, fingers to the front, thumbs to the rear, elbows pressed back. *UP*: Raise the left leg to the front, bending and elevating the knee as much as possible, leg from knee to instep vertical, toe depressed. *UP*: Replace the left foot and raise the right leg as prescribed for the left.

Execute slowly at first, then gradually increase to the cadence of double time. Continue by repeating *up* when the right and left legs are alternately in position.

Fifth Exercise.

1. *Leg*, 2. *EXERCISE*, 3. *Left (Right)*, 4. *FORWARD*, 5. *REAR*; or, 5. *GROUND*.

At the command *exercise*, place the hands on the hips, as in Fourth Exercise. *FORWARD*: Move the left leg to the front, knee straight, so as to advance the foot about 15 inches, toe turned out, sole nearly horizontal, body balanced on right foot. *REAR*: Move the leg to the rear, knee straight, toe on a line with the right heel, sole nearly horizontal. Continue by repeating *forward*, *rear*.

When the recruit has learned to balance himself, the command *forward* is followed by *GROUND*: Throw the weight of the body forward by rising on the ball of the right foot, advance and plant the left, left heel 30 inches from the right, and advance the right leg quickly to the position of *forward*. Continue by repeating *ground* when the right and left legs are alternately in the position of *forward*.



Pl. 9, Par. 38, 4 Ex.

Sixth Exercise.

1. *Lung*, 2. *EXERCISE*, 3. *INHALE*, 4. *EXHALE*.

At the command *exercise*, place the hands on the hips as in Fourth Exercise. *INHALE*: Inflate the lungs to full capacity by short, successive inhalations through the nose. *EXHALE*: Empty the lungs by a continuous exhalation through the mouth. Continue by repeating *inhale*, *exhale*.

STEPS AND MARCHINGS.*Quick Time.*

39. The length of the full step in quick time is 30 inches, measured from heel to heel, and the cadence is at the rate of 120 steps per minute.

40. To march in quick time: 1. *Forward*, 2. *MARCH*.

At the command *forward*, throw the weight of the body upon the right leg, left knee straight.

At the command *march*, move the left foot smartly, but without jerk, straight forward 30 inches from the right, measuring from heel to heel, sole near the ground; straighten and turn the knee slightly out; at the same time throw the weight of the body forward and plant the foot without shock, weight of body resting upon it; next, in like manner, advance the right foot and plant it as above; continue the march.

The cadence is at first given slowly, and gradually increased to that of quick time.

The arms hang naturally, the hands moving about 6 inches to the front and 3 inches to the rear of the seam of the trousers.

41. The instructor, when necessary, indicates the cadence of the step by calling *one, two, three, four*; or, *left, right*, the instant the left and right foot, respectively, should be planted.

This rule is general.

Double Time.

42. The length of the full step in double time is 36 inches; the cadence is at the rate of 180 steps per minute.

43. To march in double time: 1. *Forward*, 2. *Double time*, 3. *MARCH*.

At the command *forward*, throw the weight of the body on the right leg.

At the command *march*, raise the hands until the forearms are horizontal, fingers closed, nails toward the body, elbows to the rear; carry forward the left foot, knee slightly bent and somewhat raised, and plant the foot 36 inches from the right; then execute the same motion with the right foot; continue this alternate movement of the feet, throwing the weight of the body forward and allowing a natural swinging motion to the arms.

If marching in quick time, the command *forward* is omitted. At the command *march*, given as either foot strikes the ground, take one step in quick, and then step off in double time.

To resume the quick time: 1. *Quick time*, 2. *MARCH*.

At the command *march*, given as either foot strikes the ground, advance and plant the other foot in double time, resume the quick time, dropping the hands by the sides.

Recruits are also exercised in running, the principals being the same as for double time.

When marching in double time and in running, the men breathe as much as possible through the nose, keeping the mouth closed.

Distances of 100, and 180 yards are marked on the drill ground, and noncommissioned officers and men practiced in keeping correct cadence and length of pace in both quick and double time.

44. To arrest the march in quick or double time: 1. *Squad*, 2. *HALT*.

At the command *halt*, given as either foot strikes the ground, advance and plant the other foot; place the foot in rear by the side of the other. If in double time drop the hands by the sides.

The halt, while *marking time*, and marching at the *half step*, *side step*, and *back step*, is executed by the same commands.

To Mark Time.

45. Being in march: 1. *Mark time*, 2. *MARCH*.

At the command *march*, given as either foot strikes the ground, advance and plant the other foot; bring up the foot in rear, and continue the cadence by alternately raising and planting each foot on line with the other. The feet are raised about 4 inches from the ground and planted with the same energy as when advancing.

To resume the full step: 1. *Full step*, 2. *MARCH*.

Half Step.

46. Being in march: 1. *Half step*, 2. *MARCH*.

At the command *march*, given as either foot strikes the ground, take steps of 15 inches.

To resume the full step: 1. *Full step*, 2. *MARCH*.

The length of the half step in double time is 18 inches.

Side Step.

47. Being at a halt: 1. *Right (Left) step*, 2. *MARCH*.

Carry and plant the right foot 10 inches to the right; bring the left foot beside it and continue the movement in cadence of quick time.

The side step is used for small intervals only and is not executed in double time.

Back Step.

48. Being at a halt: 1. *Backward*, 2. *MARCH*.

At the command *march*, step back with the left foot 15 inches, straight to the rear, then with the right, and so on, the feet alternating.

At the command *halt*, bring back the foot in front to the side of the one in rear.

The back step is used for short distances only, and is not executed in double time.

To March by the Flank.

49. Being in march: 1. *By the right (left) flank*, 2. *MARCH*.

At the command *march*, given as the right foot strikes the ground, advance and plant the left foot, then face to the right in marching and step off in the new direction with the right foot.

To March to the Rear.

50. Being in march: 1. *To the rear*, 2. *MARCH*.

At the command *march*, given as the right foot strikes the ground, advance and plant the left foot; then turning on the balls of both feet, face to the right about and immediately step off with the left foot.

If marching in double time, turn to the right about, taking four steps in place, keeping the cadence, and then step off with the left foot.

Change Step.

51. Being in march: 1. *Change step*, 2. *MARCH*.

At the command *march*, given as the right foot strikes the ground, advance and plant the left foot; plant the toe of the right foot near the heel of the left and step off with the left foot.

The change on the right foot is similarly executed, the command *march* being given as the left foot strikes the ground.

Covering and Marching on Points.

52. The instructor selects two points and requires the recruits, in succession, to place themselves upon the prolongation of the straight line through these points and then to march upon them in both quick and double time.

It should be demonstrated to the recruits that they can not march in a straight line without selecting two points in the desired direction and keeping them covered while advancing.

A distant and conspicuous landmark is next selected as a point of direction; the recruit is required to choose two intermediate points in line with the point of direction and to march upon it by covering these points, new points being selected as he advances.

INSTRUCTION WITH ARMS.

53. The recruit, as soon as possible, is taught the use, nomenclature (Pl. 10), and care of his rifle; when fair progress has been made in the instruction without arms, he is taught the manual of arms; instruction without arms and that with arms alternate, and embrace both close and extended order.

General Rules.

54. 1st. To prevent accidents, the chamber is opened and the magazine examined, when details, detachments, and other bodies of troops are first formed and again just before they are dismissed.

2d. The piece is not carried loaded, nor with cartridges in the magazine except when specially ordered.

3d. The *cut off* is kept turned "off" except when actually using cartridges. In simulated loading and firing the motions

are made as though the magazine was in use. When cartridges are to be used the instructor cautions the men to turn the *cut off* "on."

4th. The piece is habitually carried locked; that is, with the *safety lock* at the "safe."

(*Construction of Infantry Drill Regulations.*—The fourth rule in paragraph 54, Infantry Drill Regulations, is construed to mean that the piece is carried habitually locked when the rifle is actually carried by the man, as at drill, on post, etc. At other times the piece will be kept unlocked. The cocking and locking of the piece will be effected when detachments, details, etc., are first formed in connection with the opening of the chamber and examination of the magazine prescribed in the first rule of paragraph 54; and similarly the trigger will be pulled on the empty chamber and the piece left unlocked just before the detail, etc., is dismissed.)

5th. The bayonet is not fixed except for instruction, in bayonet exercise, on guard, or when needed for purposes of defense or offense.

6th. *Fall in*, is executed with pieces at order arms.

7th. *Fall out*, *Rest*, and *At ease*, are executed as without arms.

On resuming attention the position of order arms is taken.

8th. In the instruction of the recruit, to prevent interference with or apprehension by the man on his left, especially when bayonets are fixed, care is taken in coming to the position of port arms, and like positions of the piece, that the muzzle be not swung to the rear nor dropped farther to the left than necessary for taking the position.

9th. If at the order, the piece is brought to the right shoulder at the command *march*, the three motions corresponding with the first three steps. Short movements such as *side step*, *back step*, etc., may be executed at the trail by prefacing the preparatory command with the words *At trail*; as 1. *At trail, right step*, 2. *MARCH*; the trail is taken at the command *march*.

When the facings, alignments, open and close ranks, taking intervals or distances, and assembling, are executed from the order, raise the piece to the trail while in motion and resume the order on halting.

10th. The piece is brought to the order on halting. The execution of the order begins when the halt is completed.

11th. A disengaged hand in double time is held as when without arms.

MANUAL OF ARMS.

General Rules.

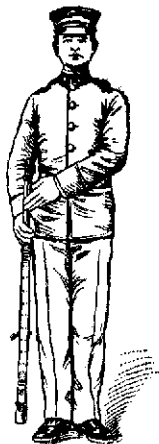
55. 1st. In all positions of the left hand at the balance (center of gravity, bayonet unfixed) the thumb clasps the piece except in *present arms*, in which position the thumb is extended along the stock; the sling if attached is included in the grasp of the hand.

2d. In all positions of the piece "diagonally across the body," the positions of the piece, left arm and hand, are the same as in port arms.

3d. In resuming the *order* from any position in the manual, the motion next to the last concludes with the butt of the piece about 3 inches from the ground, barrel to the rear, the left hand above and near the right, steadying the piece, fingers extended and joined, forearm and wrist straight and inclining downward, all fingers of the right hand grasping the piece. To complete the order, lower the piece gently to the ground with the right hand, drop the left quickly by the side, and take the position of order arms.

Allowing the piece to drop through the right hand to the ground, or other similar abuse of the rifle to produce effect in executing the manual, is prohibited.

4th. In coming to the *right (left) shoulder* from any position in the manual, the motion next to the last concludes with the piece on the shoulder, barrel up and inclined at an angle of about 45 degrees from the horizontal, trigger guard in the hollow of the shoulder, right elbow near the side, heel of the butt between the first two fingers of the right hand, thumb and fingers closed on the butt, the right hand in front and to the left of the right elbow, so as to bring the piece into a vertical plane perpendicular to the front; thumb and fingers of left hand extended and joined, fingers resting on the small of the stock, the tip of forefinger touching end of cocking piece, wrist straight, and elbow down. To complete the movement, drop the left hand by the side,



Pl. 11, Par. 55, 3d.

5th. The cadence of the motions is that of quick time; the recruits are at first required to give their whole attention to the details of the motions, the cadence being gradually acquired as they become accustomed to handling their pieces. The instructor may require them to count aloud in cadence with the motions.

6th. Open and close chamber, sling arms, secure arms, fix and unfix bayonet, stack and take arms, and movements relative to the cartridge and sight, are executed with promptness and regularity, but not in cadence.

7th. The manual is taught at a halt and the movements are, for the purpose of instruction, divided into motions and executed in detail; in this case the command of *execution* determines the prompt execution of the first motion, and the commands, **TWO, THREE, FOUR**, that of the other motions.

To execute the movements in detail, the instructor first cautions: *By the numbers*; all movements divided into motions are then executed as above explained until he cautions: *Without the numbers*; or commands movements other than those in the manual of arms.

8th. Before requiring recruits to take a position or execute a motion for the first time, the instructor executes the same for illustration; after which he causes them to execute it individually, then to execute it together at command.

9th. In the battle exercises, or whenever circumstances require, the regular positions of the manual of arms and the firings may be ordered without regard to the previous position of the piece.

Position of Order Arms.

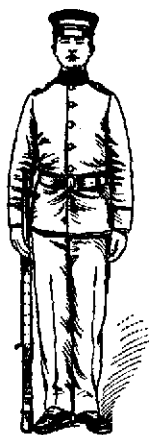
56. The butt rests evenly on the ground, barrel to the rear, toe of the butt on a line with and touching the toe of the right shoe, arms hanging naturally, elbows near the body, right hand holding the piece between the thumb and fingers, the first two fingers in front, the others in rear.

57. Being at order arms: 1. *Present*, 2. **ARMS.**

Without changing the position of the fingers, with the right hand carry the piece in front of the center of the body, barrel to the rear and vertical, grasp it with the left hand at the balance, forearm horizontal and resting against the body. (**TWO**) Grasp the small of the stock with the right hand.

Being at present arms: 1. *Order*, 2. *ARMS*.

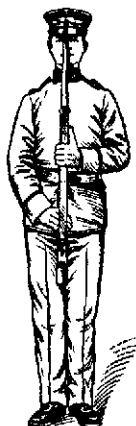
Let go with the right hand, lower and carry the piece to the right with the left hand, regrab the piece with all the fingers of the right just above the lower band, let go with the left hand



Pl. 12, Par. 56.



Pl. 13, Par. 56.



Pl. 14, Par. 57.



Pl. 15, Par. 58.

and take the next to last position in coming to the order. *(TWO)* Complete the order.

58. Being at order arms: 1. *Port*, 2. *ARMS*.

Without changing the position of the fingers, with the right hand raise and throw the piece diagonally across the body, grasp it smartly with both hands, the right, palm down, at the small of the stock; the left, palm up, at the balance, thumb clasp the piece, barrel up, sloping to the left and crossing opposite the junction of the neck with the left shoulder; right forearm horizontal; left forearm resting against the body; the piece in a vertical plane parallel to the front.

Being at port arms: 1. *Order*, 2. *ARMS*.

Let go with the right hand, lower and carry the piece to the right with the left hand, regrab the piece with all the fingers of the right just above the lower band, let go with the left hand

and take the next to last position in coming to the order. **(TWO)** Complete the order.

59. Being at port arms: 1. *Open*, 2. **CHAMBER**, 3. *Close*, 4. **CHAMBER**.

At the second command, turn the *safety lock* up and seize the bolt handle with the thumb and forefinger of the right hand,

turn the handle up, draw the bolt back and glance at the chamber and magazine to see that they are empty.

At the fourth command, push the bolt forward, turn the bolt handle down, turn the *safety lock* to the "safe" and carry the right hand to the small of the stock.

60. Being at present arms: 1. *Port*, 2. **ARMS**.

Pl. 16, Par. 59.



Carry the piece diagonally across

the body and take the position of port arms.

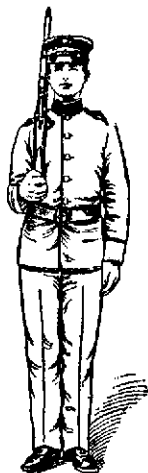
Being at port arms: 1. *Present*, 2. **ARMS**.

Carry the piece to a vertical position in front of the center of the body, barrel to the rear, and take the position of present arms.

61. Being at order arms: 1. *Right shoulder*, 2. **ARMS**.

Without changing the position of the fingers, with the right hand raise and carry the piece diagonally across the body, carry the right hand quickly to the butt embracing it, the heel between the first two fingers. **(TWO)** Take the next to last position in coming to the right shoulder. **(THREE)** Drop the left hand by the side.

Being at right shoulder arms: 1. *Order*, 2. **ARMS**.



Pl. 17, Par. 61.



Pl. 18, Par. 61.

Press the butt down quickly with the right hand and throw the piece diagonally across the body, the right hand retaining its grasp of the butt. **(TWO)** Let go with the right hand, lower and carry the piece to the right with the left hand, regrab the piece with all the fingers of the right just above the lower band, let go with the left hand and take the next to last position in coming to the order. **(THREE)** Complete the order.

62. Being at port arms: 1. *Right shoulder*, 2. **ARMS**.

Change the right hand to the butt. **(TWO)** Take the next to last position in coming to the right shoulder. **(THREE)** Drop the left hand by the side.

Being at right shoulder arms: 1. *Port*, 2. **ARMS**.

Press the butt down quickly with the right hand and throw the piece diagonally across the body, the right hand retaining its grasp at the butt. **(TWO)** Change the right hand to the small of the stock.

63. Being at right shoulder arms: 1. *Present*, 2. **ARMS**.

Press the butt down quickly with the right hand and throw the piece diagonally across the body, the right hand retaining its grasp of the butt. **(TWO)** Change the right hand to the small of the stock. **(THREE)** Carry the piece to a vertical position in front of the center of the body, barrel to the rear, and take the position of present arms.

Being at present arms: 1. *Right shoulder*, 2. **ARMS**.

Carry the piece diagonally across the body and the right hand quickly to the butt embracing it, the heel between the first two fingers. **(TWO)** Take the next to last position in coming to the right shoulder. **(THREE)** Drop the left hand by the side.

64. Being at right (left) shoulder arms: 1. *Left (Right) shoulder*, 2. **ARMS**.

Change the right hand quickly to and grasp the small of the stock, back of hand to the right; at the same time grasp the butt with the left hand, heel between first and second fingers, thumb and fingers closed on the stock. **(TWO)** Press down smartly on the butt, raising the piece to a nearly vertical position, barrel to the front; carry and place the piece on the left shoulder, barrel up, trigger guard in the hollow of the left shoulder. **(THREE)** Drop the right hand by the side.



Pl. 19, Par. 64.

65. Being at left shoulder arms: 1. Order, 2. ARMS.

Grasp the piece with the right hand at the small of the stock. **(TWO)** Take the position of port arms. **(THREE)** Take the next to last position in coming to the order. **(FOUR)** Complete the order.

Being at order arms: 1. Left shoulder, 2. ARMS.

Take the position of port arms. **(TWO)** Carry the piece with the right hand to the position of left shoulder, changing the left hand to the butt. **(THREE)** Drop the right hand by the side.

66. Being at left shoulder arms: 1. Port, 2. ARMS.

Grasp the piece with the right hand at the small of the stock. **(TWO)** Take the position of port arms.

Being at port arms: 1. Left shoulder, 2. ARMS.

Carry the piece with the right hand to the position of left shoulder, changing the left hand to the butt. **(TWO)** Drop the right hand by the side.

67. Being at left shoulder arms: 1. Present, 2. ARMS.

Grasp the piece with the right hand at the small of the stock.

(TWO) Take the position of port arms. **(THREE)** Take the position of present arms.

Being at present arms: 1. Left shoulder, 2. ARMS.

Take the position of port arms. **(TWO)** Carry the piece with the right hand to the position of left shoulder, changing the left hand to the butt. **(THREE)** Drop the right hand by the side.

68. Being at order arms: 1. Parade, 2. REST.

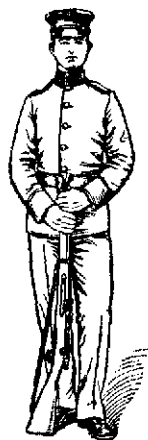
Carry the right foot 6 inches straight to the rear, left knee slightly bent, carry the muzzle in front of the center of the body, barrel to the left, grasp the piece with the left hand just below the stacking swivel, and with the right hand below and against the left.

Being at parade rest: 1. Squad, 2. ATTENTION.

Resume the order, the left hand quitting the piece opposite the right breast.

69. Being at order arms: 1. Fix, 2. BAYONET.

Execute parade rest; grasp the handle of the bayonet with the right hand, back of the hand toward the body. Draw the bayonet from the scabbard and fix it on the barrel, glancing at the muzzle; resume the order, drop the left hand by the side.



Pl. 20, Par. 68.

70. Being at order arms: 1. Charge, 2. BAYONET.

Half face to the right, carry the right heel 6 inches to the rear and 2 inches to the right of the left heel, at the same time raise the piece with the right hand without changing position of fingers, inclining the barrel to the front, grasp it with the left hand at the balance, back of hand down, thumb clasping piece, elbow against the body, grasp the small of the stock with the right hand and bring the point of the bayonet to the height of the breast, right hand supporting the stock firmly against the front of the right hip, the body inclined slightly forward, left knee slightly bent.

Being at charge bayonet: 1. Order, 2. ARMS.

Face to the front, at the same time let go the piece with the right hand and lower it to the right side with the left hand, regrab it with the right just above the lower band, and take the next to last position in coming to the order. **(TWO)** Complete the order.

71. Being at port arms: 1. Charge, 2. BAYONET.

Half face to the right and take the position of charge bayonet.

Being at charge bayonet: 1. Port, 2. ARMS.

Face to the front, and at the same time take the position of port arms.

72. Being at right shoulder arms: 1. Charge, 2. BAYONET.

Press the butt down quickly with the right hand and throw the piece diagonally across the body, the right hand retaining its grasp of the butt. **(TWO)** Change the right hand to the small of the stock. **(THREE)** Take the position of charge bayonet.

Being at charge bayonet: 1. Right shoulder, 2. ARMS.

Face to the front, at the same time carry the piece diagonally across the body and the right hand quickly to the butt embracing it, the heel between the first two fingers. **(TWO)** Take the next to last position in coming to the right shoulder. **(THREE)** Drop the left hand by the side.

73. Being at left shoulder arms: 1. Charge, 2. BAYONET.

Grasp the piece with the right hand at the small of the stock. **(TWO)** Take the position of port arms. **(THREE)** Take the position of charge bayonet.



Pl. 22, Par. 70.

Being at charge bayonet: 1. *Left shoulder*, 2. *ARMS*.

Face to the front and at the same time take the position of port arms. (*TWO*) Carry the piece with the right hand to the position of left shoulder, changing the left hand to the butt. (*THREE*) Drop the right hand by the side.

74. Being at order arms: 1. *Unfix*, 2. *BAYONET*.

Take the position of parade rest; grasp the handle of the bayonet firmly with the right hand, pressing the spring with the forefinger of the right hand, raise the bayonet until the handle is about 12 inches above the muzzle of the piece, drop the point to the left, back of the hand toward the body, and glancing at the scabbard return the bayonet, the blade passing between the left arm and body; regrasp the piece with the right hand and resume the order.

If marching, the bayonet is fixed or unfixed in the most expeditious and convenient manner, and the piece returned to the original position.

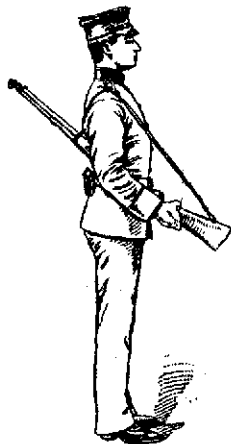
75. Being at order arms: 1. *Trail*, 2. *ARMS*.

Grasp the piece with all the fingers of the right hand without changing its position, raise piece slightly, right arm slightly bent, and incline the muzzle forward so that the barrel makes an angle of about 30 degrees with the perpendicular.

When it can be done without danger or inconvenience to others, the piece may be grasped at the balance and the muzzle lowered until the piece is horizontal; a similar position in the left hand



Pl. 23, Par. 75.



Pl. 24, Par. 76.

may be used.

The piece should be brought to the trail on coming indoors.

Being at trail arms: 1. *Order*, 2. *ARMS*.

Lower the piece with the right hand and resume the order.

76. 1. *Sling*, 2. *ARMS*.

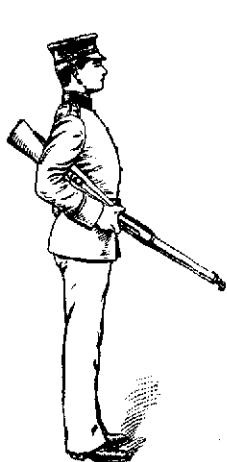
The right arm is passed between the rifle and the sling which rests upon the shoulder, piece in rear of shoulder, muzzle up and barrel to the rear; right hand steadying the piece.

The piece may be slung on either shoulder.

The gun sling should never be so tightly drawn that it can not be readily adjusted. Arms are slung only on route marches.

77. 1. *Secure*, 2. *ARMS*.

The piece is held in the right hand at the balance, barrel down, sloping downward and to the front; right hand supported against the right hip, upper arm against the stock. A corresponding position in the left hand may be used. *Secure arms* is used only in inclement weather.



Pl. 25, Par. 77.



Pl. 26, Par. 78.



Pl. 27, Par. 78.

Rifle Salute.

78. Being at right (left) shoulder arms: 1. *Rifle*, 2. *SALUTE*.

Carry the left (right) hand smartly to the small of the stock, forearm horizontal, palm of hand down, thumb and forefingers extended and joined, forefinger touching end of cocking piece. (*TWO*) Drop the left (right) hand by the side.

Being at order or trail arms: 1. *Rifle*, 2. *SALUTE*.

Carry the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forefinger against piece near the muzzle. (*TWO*) Drop the left hand by the side.

To Dismiss the Squad.

79. Being at a halt: 1. *Port*, 2. *ARMS*, 3. *Open*, 4. *CHAMBER*, 5. *Close*, 6. *CHAMBER*, 7. *DISMISSED*.

INSTRUCTION OF THE SKIRMISHER.

80. This instruction, at first individual, is begun when the soldier has made some progress in marching and in handling the piece. Movements are first taught on the drill ground with every attention to detail. Afterwards under direction of company officers, the instruction is given on ground previously selected with reference to the movements to be executed. The location is frequently changed to accustom the men to new situations, and care is taken never to order movements or positions at variance with the accidents of the ground.

81. Having conducted the men to a point overlooking the vicinity, the instructor calls attention to the form of the ground and the different military purposes to which its features are adaptable, using and explaining the military terms that apply.

He explains the circumstances under which each accident of the ground would be valuable as cover, and how to use it, both in its original condition and by modifying it, against an enemy supposed to be in a certain direction.

82. The recruits are posted at points indicated by the instructor, in positions to see and fire upon the enemy. To obtain the best cover it is generally necessary to lie down or kneel, but considerations of health occasionally make it necessary to permit the men to stand. In such cases it is explained why the usual practice is departed from.

Use of Cover.

83. The best kind of cover is that which, while it masks the skirmishers from the sight and fire of the enemy, affords favorable conditions for firing and for readily advancing and retreating.

84. The instructor explains the following methods of obtaining a rest for the rifle with the least exposure of the body while aiming.

Take post preferably behind the right of walls, rocks, heaps of stone or earth, and in the windows and doorways of the houses on the left side of a street; behind a tree, rest the rifle on a limb to the right, or rest the forearm against the right side of the trunk.

Behind embankments of earth, in ditches and furrows, kneel or lie down and rise slightly to fire; lie down in rear of a crest or the edge of a plateau, keeping the slope toward the enemy in view.

At the edge of a wood, where there is no ditch nor bank of earth, remain a little back from the edge, under cover of the first trees.

The instructor explains how to prepare the crest of a wall for defensive purposes and how to prepare loopholes or construct platforms when the wall is too high to fire over.

85. A well-instructed soldier or noncommissioned officer is then placed in the position of the enemy and required to advance upon the skirmishers; the latter will carefully observe his movements and aim at him whenever he exposes himself, adjusting the sight to agree with the distance.

86. After a few such exercises, recruits are practiced individually in advancing on positions indicated for an enemy, with instructions to halt at places selected by themselves where cover offers, and execute simulated firing, a few shots at each place, then continue to further cover, and fire.

Before advance is begun, the recruit will be instructed that in going from one point of cover to another he may deviate somewhat from the direction to take advantage of chance cover or screen, but must resume the direction on advancing. In order to keep out of sight of the enemy he may stoop, or even creep or crawl.

87. It must be borne in mind that the object of these exercises is to give the soldier the knowledge necessary to grasp the advantages of the ground at a glance.

SCHOOL OF THE SQUAD.

88. Soldiers are grouped into squads for purposes of discipline, control and order in quarters and camp, at drill, on the march and in battle.

89. The squad proper consists of a corporal and seven privates. The corporal is the squad leader and when absent is replaced by a designated private. If no private is designated the senior in length of service acts as leader.

90. Men are taught the necessity of remaining with their squad and, in case their own squad is broken up or they are unavoidably separated therefrom, to place themselves under the nearest leader and to remain with his squad as if it were the one to which they originally belonged.

91. In battle, officers and sergeants endeavor to preserve the integrity of squads; they designate new leaders to replace those disabled, organize new squads when necessary, and see that every man is placed in a squad.

92. The corporal, when in ranks, is posted as the left man in the front rank of the squad. When the corporal leaves the ranks, his rear rank man steps into the front rank and the file remains blank until the corporal returns to his place in ranks, when his rear rank man steps back into the rear rank.

CLOSE ORDER.

93. When the recruits have received a few preliminary lessons in the School of the Soldier, they are divided into groups of eight, thus forming temporary squads.

These squads are placed under corporals, who, under the supervision of sergeants and officers, gain the necessary experience to qualify them as squad leaders, while teaching the recruits the movements in close and extended order.

To Size and Form the Squad.

94. The instructor arranges the men according to height in column at facing distance, tallest man in front, and commands: 1. *In two ranks form squad*, 2. **MARCH**, 3. **FRONT**.

At the command *march*, the first man faces to the left; the second man places himself in the rear rank covering the first at a distance of 40 inches; both place the left hand upon the hip; the other men close in quick time, and form alternately in front and rear rank, as explained for the first two, each man facing to the left upon arriving at his proper place, then dressing to the right.

All the men having formed, the instructor commands: **FRONT**. Each man turns his head and eyes to the front and drops his left hand by the side.

The squad having been sized, the men are cautioned to take the same relative positions when the squad is formed thereafter. These positions are frequently changed at drill for purposes of instruction.

95. To form the squad, the corporal places himself 3 paces in front of where the center is to be formed, and commands: **FALL IN**.

The men assemble at attention in their proper places in double rank, arms at the order, each man dropping his left hand as soon as the man on his left has his interval.

The instructor then commands: **COUNT OFF**.

At this command, all except the right file execute *eyes right* and beginning on the right the men in each rank count *one, two, three, four*; each man turns his head and eyes to the front as he counts.

The instructor next commands: 1. *Port*, 2. **ARMS**, 3. *Open*, 4. **CHAMBER**, 5. *Close*, 6. **CHAMBER**.

In case the examination reveals the presence of cartridges, the soldier removes them without further instruction.

Alignments.

96. The alignments are first taught by requiring the recruits to align themselves upon two files established as a base.

Being at a halt: 1. *Two files from the right (left) three paces to the front*, 2. **MARCH**.

At the command *march*, the first two files on the right march three paces to the front, halt, execute *eyes right*, and place the palm of the left hand upon the hip whether dressing to the right or left; the instructor aligns them, sees that the rear rank men cover their file leaders, and then commands: 1. *Right (Left)*, 2. *DRESS*, 3. *FRONT*. At the command *dress*, the remaining files march to the front, each man shortening the last step so as to find himself about 6 inches in rear of the new alignment, which must never be passed; he then executes *eyes right*, places the left hand upon the hip whether dressing to the right or left, and taking steps of 2 or 3 inches, moves up, places his right arm lightly against the arm of the man on his right, so that his eyes and shoulders are in line with those of the men on his right.

The instructor verifies the alignment of both ranks from the right flank and orders up or back such men as may be in rear or in advance of the line; only the men designated move.

At the command *front*, given when the ranks are aligned, each man turns his head and eyes to the front and drops his left hand by the side. *This rule is general.*

97. In the first drills the basis of the alignment is established parallel to the front of the squad; afterward, in oblique directions.

98. The recruits having learned to align themselves, the instructor establishes the base file and then aligns the squad by the commands: 1. *Right (Left)*, 2. *DRESS*, 3. *FRONT*.

At the command *dress*, all the men except the base file move forward and dress as previously explained, the rear rank men being careful to cover in file.

99. Alignments to the rear are executed on the same principles: 1. *Right (Left) backward*, 2. *DRESS*, 3. *FRONT*.

The men step back, halt a little in rear of the line and immediately dress up by steps of 2 or 3 inches.

100. To execute the alignments, using the side step, the instructor establishes the base file a few paces to the right or left of the squad and commands: 1. *Right (Left) step*, 2. *(Right or Left)*, 3. *DRESS*, 4. *FRONT*.

At the command *dress*, the men execute the side step, close toward the base file and dress as already explained.

To Take Intervals.

101. Being in line at a halt: 1. *To the right (left) take intervals*, 2. *MARCH*, 3. *Squad*, 4. *HALT*.

At the first command, the rear rank steps back to 4 paces distance from the front rank; at the command *march*, all face to the right and the leading man of each rank steps off; the other men step off in succession so as to follow the preceding man at 4 paces.

At the command *halt*, given when all have their intervals, all halt and face to the front.

To Assemble.

1. *To the right (left) assemble*, 2. *MARCH*.

The front rank man on the right stands fast, the rear rank man on the right closes to 40 inches. The other men face to the right, close by the shortest line and face to the front.

To Take Distances.

102. Being in line at a halt and having counted off:

1. *Front take distance*, 2. *MARCH*, 3. *Squad*, 4. *HALT*.

At the command *march*, number one of the front rank moves straight to the front; numbers two, three and four of the front rank and numbers one, two, three and four of the rear rank, move in the order named straight to the front, each stepping off so as to follow the preceding man at 4 paces. The command *halt* is given when all have their distances.

In case more than one squad is in line, each squad executes the movement as above and each rank of numbers guides on its right number.

To Assemble.

1. *Assemble*, 2. *MARCH*.

Number one of the front rank stands fast; the other numbers move forward to their proper places in line.

MARCHINGS.

103. When the guide is announced in the command, the man on the designated flank conducts the march, but in no other respect acts as the guide.

To March in Line.

104. Being in line at a halt: 1. *Forward*, 2. *Guide (right or left)*, 3. **MARCH.**

The men step off, the guide marching straight to the front; the rear rank men cover their file leaders.

The instructor sees that the ranks preserve the alignment and the intervals toward the side of the guide. The men yield to pressure from that side and resist pressure from the opposite direction; by slightly shortening or lengthening the step they gradually recover the alignment, and by slightly opening out or closing in they gradually recover the interval, if lost; while habitually keeping the head to the front, they may occasionally glance toward the side of the guide to assure themselves of the alignment and interval, but the head is turned as little as possible for this purpose.

To change the guide: *Guide (left or right)*.

To March Backward.

105. Being at a halt: 1. *Backward*, 2. *Guide (right or left)*, 3. **MARCH.**

To March to the Rear.

106. Being in march: 1. *To the rear*, 2. **MARCH**, 3. *Guide (right or left)*.

To March Faced to the Flank.

107. Being in line at a halt: 1. *Right (Left)*, 2. **FACE**, 3. *Forward*, 4. **MARCH.**

If marching: 1. *By the right (left) flank*, 2. **MARCH.**

The leading man of the front rank is the guide. His rear rank man marches abreast of him, preserving an interval of 30 inches. The other men follow at facing distance.

To halt the squad: 1. *Squad*, 2. *HALT*; and to face to the front: 3. *Left (Right)*, 4. *FACE*; or, to march again to the front without halting: 1. *By the left (right) flank*, 2. *MARCH*, 3. *Guide (right or left)*.

The squad may be marched to the flank in a similar manner, first causing the rear rank to close to facing distance. On facing or marching to the front the rear rank falls back to or gains its distance of 40 inches. The squad marching by the flank in this manner changes direction as in paragraph 195.

The Oblique March.

108. For the instruction of recruits, the squad being correctly aligned, the instructor causes the squad to face half right or half left, points out to the men their relative positions, and explains that these are to be maintained in the oblique march.

109. Being in line: 1. *Right (Left) oblique*, 2. *MARCH*.

Each man steps off in a direction 45 degrees to the right of his original front. He preserves his relative position, keeping his shoulders parallel to those of the man next on his right, and so regulates his steps as to make the ranks remain parallel to their original front.

The rear rank conforms to the foregoing, each man marching so as to cover his file leader upon resuming the original direction.

At the command *halt*, the men halt faced to the front.

To resume the original direction: 1. *Forward*, 2. *MARCH*, 3. *Guide (right or left)*.

The men half face to the left in marching and then move straight to the front.

At *half step* or *mark time* while obliquing, the oblique march is resumed by the commands: 1. *Full step*, 2. *MARCH*.

110. In the oblique march, the guide is, without indication, always on the side toward which the oblique is made. On resuming the direct march in line, the guide is announced.

These rules are general.

111. The column of files obliques by the same commands and means.

To March in Double Time.

112. Being in line at a halt: 1. *Forward*, 2. *Guide* (right or left), 3. *Double time*, 4. *MARCH*.

To Pass from Quick to Double Time and the Reverse.

113. 1. *Double time*, 2. *MARCH*.

To resume quick time: 1. *Quick time*, 2. *MARCH*.

Being in Line, to March in Column of Twos or Files.

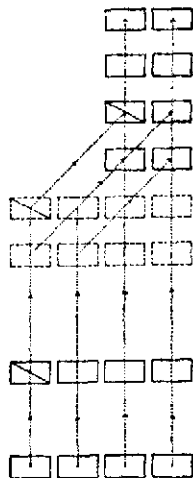
114. These movements are used chiefly when the squad is part of a larger organization, as the company, to reduce the front in order to pass a defile; the original formation is resumed as soon as the defile is passed, and in such manner as not to invert the numbers of the squad.

1. *Right (Left) by twos*, 2. *MARCH*.

At the first command, the rear rank closes to facing distance, increasing the length of step if in march. At the command *march*, the two files on the right move forward; the two files on the left mark time till disengaged, when they oblique to the right in full step and follow the two files on the right at facing distance.

1. *Right (Left) by file*, 2. *MARCH*.

At the first command, the rear rank closes to facing distance, increasing the length of step if in march. At the command *march*, all files except the right mark time till successively disengaged, when they oblique to the right in full step and follow the preceding file at facing distance.



Pl. 28, Par. 114.

Column of files from column of twos is similarly executed.

Being in Column of Twos or Files, to March in Line to the Front.

115. 1. *Left (Right) front into line*, 2. *MARCH*, 3. *Full step*, 4. *MARCH*.

At the second command, the leading two files take the half step; the rear two, at full step, oblique to the left till uncovered, move up abreast of the leading two files, and take the half step.

At the fourth command, given when the left files are in line, the front rank takes the full step and is followed by the rear rank at its proper distance.

If in column of files, at the second command, the leading file takes the half step; the other files oblique to the left till uncovered, move up abreast of the leading file and take the half step; the rear rank men gain the distance of 40 inches from the front rank as soon as practicable.

The fourth command is given when the last file is in line.

Column of twos from column of files is formed in a similar manner; the word *Twos* precedes the commands; the rear rank remains at facing distance.

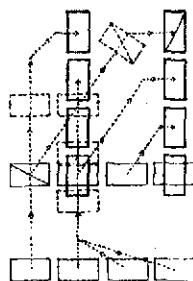
TURNINGS.

To Turn on Fixed Pivot.

116. 1. *Squad right (left)*, 2. *MARCH*, 3. *Squad*, 4. *HALT*; or, 3. *Full step*, 4. *MARCH*, 5. *Guide (right or left)*.

At the second command, the pivot man marks time turning to the right in his place; the other front rank men, by twice obliquing to the right, place themselves abreast of the pivot and mark time. The rear rank does not turn as a rank; the men conform to the movement of the front rank, place themselves covering their file leaders at a distance of 40 inches and mark time. The fourth command is given when the last man arrives in his new position.

The turn on fixed pivot is used in all formations from line into column and the reverse.



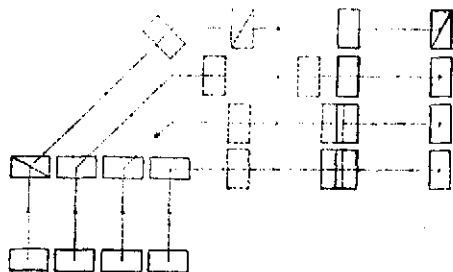
Pl. 29, Par. 116.

To Turn on Moving Pivot.

117. Marching in line: 1. *Right (Left) turn*, 2. *MARCH*, 3. *Full step*, 4. *MARCH*, 5. *Guide (right or left)*.

At the second command, the pivot man, who is the guide during the movement, faces to the right in marching and takes the

half step; the other front rank men oblique to the right until opposite their places in line, execute a second right oblique and take the half step on arriving abreast of the pivot man. The rear rank advances and turns on the same ground and in the same manner as the front rank, maintaining the distance of 40 inches. All take the full step at the fourth command, which is



Pl. 30, Par. 117.

given when the last man arrives in his new position.

The movement is executed from a halt in the same manner. At the second command, the pivot man faces to the right as in marching and steps off at half step.

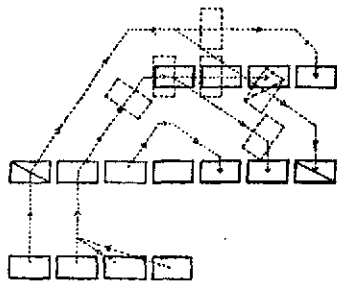
Right (Left) half turn is executed in a similar manner. The pivot man makes a half change of direction to the right and the other men make quarter changes in obliquing.

The turn on moving pivot is used by subdivisions of a column in executing changes of direction.

The About.

118. 1. *Squad right (left) about*, 2. *MARCH*, 3. *Squad*, 4. *HALT*; or, 3. *Full step*, 4. *MARCH*, 5. *Guide (right or left)*.

At the second command, the front rank twice executes *squad right*; the man on the marching flank moves at full step and without pause to his position; the others mark time in the midway position until the man on the marching flank is abreast of them, and then execute the second *squad right*. The rear rank men move to their new positions by twice executing without pause what is prescribed for them in the turn on fixed pivot.



Pl. 31, Par. 118.

The fourth command is given when the last man is in position.

TO STACK AND TAKE ARMS.

119. Three pieces only are used to make a stack; pieces not so used are, in this connection, termed *loose pieces*. Pieces provided with stacking swivel are never stacked with the bayonet fixed.

Being in line at order arms: 1. *Stack*, 2. *ARMS*.

At the command *stack*, each even number of the front rank raises his piece with the right hand, grasps it with the left at the upper band and rests the butt between his feet, barrel to the front, muzzle inclined slightly to the front and opposite the center of the interval on his right, the thumb and forefinger raising the stacking swivel; each even number of the rear rank then passes his piece, barrel to the rear, to his file leader, who grasps it between the bands with his right hand and throws the butt about 26 inches in advance of that of his own piece and opposite the right of the interval, the right hand slipping to the upper band, the thumb and forefinger raising the stacking swivel, which he engages with that of his own piece; each odd number of the front rank raises his piece with the right hand, carries it well forward, barrel to the front, the left hand, guiding the stacking swivel, engages the lower hook of the swivel of his own piece with the free hook of that of the even number of the rear rank; he then turns the barrel outward into the angle formed by the other two pieces and holds the butt about 4 inches above the ground and 6 inches in front of the line of the toes.

At the command *arms*, each odd number of the front rank carries the butt of his piece up and to the front with a circular motion, so as to avoid injuring the sight, and lowers the butt to the ground, to the right of and against the toe of his right shoe.

The stacks made, the loose pieces are laid on them by the even numbers of the front rank.

When each man has finished handling pieces, he takes the position of the soldier.

The instructor may then rest or dismiss the squad, leaving the arms stacked.

On assembling, the men take their places in rear of the stacks.

1. *Take*, 2. *ARMS*.

At the command *take*, the loose pieces are returned by the even numbers of the front rank; each even number of the front rank then grasps his own piece with the left hand, the piece of his rear rank man with his right hand, grasping both

between the bands; each odd number of the front rank grasps his piece in the same way with the right hand.

At the command *arms*, each odd number of the front rank disengages his own piece by raising the butt from the ground and then turning the piece to the right, detaching the piece from the stack; each even number of the front rank disengages and detaches his piece by turning it to the left, and then passes the piece of his rear rank man to him, and all resume the order.

Unless care is taken by the odd number to carry the butt in the circular manner described there is danger that the front sight will be caught and bent by the rod bayonet of the piece of the even number on turning the piece to make or break the stack.

Should any squad have numbers two and three blank files, number one rear rank takes the place of number two rear rank in making and breaking the stack; the stacks made or broken, he resumes his post.

120. Being in single rank, arms are stacked and taken on the same principles as in double rank; at the preparatory command, number three steps back and covers number two; numbers two and three execute what has been explained for the even numbers of the front and rear rank, respectively; number three then resumes his place; number one uses his piece as explained for the odd number of the front rank.

POSITIONS KNEELING AND LYING DOWN.

121. Being at order arms: **KNEEL.**

All half face to the right, carry the right toe about 10 inches to the rear and 10 inches to the left of the left heel; kneel on right knee, bending the left, left toe slightly inclined to the right, right leg pointing directly to the right; weight of body resting on right heel; place left forearm across left thigh, hand hanging naturally; the piece remains in the position of order arms, right hand grasping it above the lower band. *This is the position of order kneeling.*



Pl. 32, Par. 121.

122. Being at the order kneeling: **RISE.**

Rise and take the position of order arms.

123. Being at the order kneeling: **LIE DOWN.**

Place the right knee against the left heel.

(TWO) Draw back the left foot and place the knee on the ground; place the left hand well forward on the

ground and lie flat on the belly, thus inclining the body about 35 degrees to the right; the piece is lowered at the same time with the right hand, toe resting on the ground, barrel up, muzzle off the ground, left hand at the balance, left elbow on the ground, right hand at the small of the stock opposite the neck. *This is the position lying down.*



Pl. 33, Par. 123.

124. Being in the position lying down: **KNEEL.**

Place the left hand on the ground and raise the body on the knees; draw up and place the left foot by the side of the right knee, raise and place the piece in the position of the order kneeling. (TWO) Take the position of order kneeling.

125. Being at order arms: **LIE DOWN.**

Take the position of order kneeling, except that the right knee is placed against the left heel. (TWO) Draw back the left foot and place the knee on the ground; place the left hand well forward on the ground and lie flat on the belly, thus inclining the body about 35 degrees to the right; the piece is lowered at the same time with the right hand, toe resting on the ground, barrel up, muzzle off the ground, left hand at the balance, left elbow on the ground, right hand at the small of the stock opposite the neck.

126. Being in the position lying down: **RISE.**

Place the left hand on the ground and raise the body on the knees; draw up and place the left foot by the side of the right knee, raise and place the piece in the position of the order kneeling. (TWO) Rise and take the position of order arms.



Pl. 34, Par. 127.

127. If unarmed, the movements kneeling, lying down, and rising, are executed as with arms, except that in the position kneeling the

right hand rests on the right thigh, and in moving to and from the lying position the right hand is placed on the ground; in the position lying down the forearms are against each other on the ground, left arm in front.

128. In extended order the soldier kneels, lies down, and returns to the kneeling and standing positions in the most convenient manner.

INSPECTION OF ARMS.

129. The instructor dresses the rear rank back to 3 paces distance from the front rank and commands: 1. *Inspection*, 2. *ARMS*.

At the second command, cartridge boxes are opened if worn.

Each man as the inspector approaches him executes *port arms* and *open chamber*.

The inspector takes the piece, grasping it with his right hand just above the rear sight (the man dropping the hands by the sides), inspects it, and, with the hand and piece in the same position as in receiving it, hands it back to the man, who takes it with the left hand at the balance, executes *close chamber* and *order arms*.

As the inspector returns the piece, the next man executes *port arms* and *open chamber*, and so on through the squad.

Should the piece be inspected without handling, the man executes *close chamber* and *order arms* as soon as the inspector has passed the next man.

The inspection of arms is from right to left and the inspector examines the boxes as he passes in rear of the rank from left to right.

Each box is closed as soon as inspected.

Upon completion of the inspection the instructor dresses the rear rank to its proper distance.

LOADINGS AND FIRINGS.*

General Rules.

130. The post of the instructor is 3 paces in rear of the squad, but in actual firing he places himself where he can best make himself heard and at the same time observe the effect of the fire. The objective should be in plain view and so designated as to be easily distinguished by all.

131. The commands for loading, aiming, and firing are the same in close and extended order and whether the squad is standing, kneeling, or lying down. In close order the command for kneeling or lying down precedes the command for firing.

* The education of the soldier in musketry is not treated of in these, but in Firing Regulations for Small Arms.

After fire is opened upon any designated objective the designation of objective is omitted from commands until it is desired to fire upon another objective; troops are trained to continue their fire upon a designated objective until the designation is changed.

132. When kneeling or lying down in close order the rear rank does not execute the loadings, aimings, or firings.

133. The recruits are first taught the motions of loading and firing without using cartridges; after a few lessons they should use dummy cartridges, and when well instructed, the drill may close with a few rounds of blank cartridges.

134. Cartridges are not used unless the words *With dummy (blank or ball) cartridges* precede the command **LOAD**.

135. At the first preparatory command for firing, the squad being in line standing, pieces loaded or supposed to be so, both ranks take the position of load; the cartridge box, if worn, is slipped to the hip and opened; at the command indicating the distance, the sights are adjusted; the cartridge box is closed and replaced after executing *cease firing*.

136. The command or signal *cease firing* is always used to stop the firing, and may be given at any time after the preparatory command for firing, whether the firing has actually commenced or not.

137. The piece is always locked (turned to the "safe") after executing *cease firing*.

To Load.

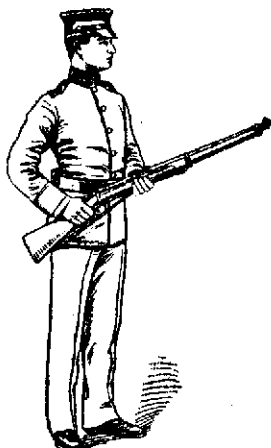
138. Being in line at order arms: 1. *Squad*, 2. **LOAD**.

At the command *load*, each front-rank man makes a half face to the right and plants the right foot so that the heel is about 6 inches to the rear and 2 inches to the right of the left heel, the feet making with each other an angle of about 70 degrees; each rear-rank man moves forward, plants his left toe near the right toe of his file leader, and brings the right foot to its corresponding position as described for the front rank; the men of both ranks raise the piece with the right hand and drop it into the left at the balance, left thumb extended along the stock, muzzle at the height of the breast, turn the safety lock up, and grasp the bolt handle with the thumb and forefinger of the right hand. (*TWO*) With the right hand turn and draw the bolt back, take a loaded clip and insert the end in the clip slots, place the thumb on the powder space of the top cartridge, the fingers extending around the

piece and tips resting on the magazine floor plate, force the cartridges into the magazine by pressing down with the thumb; without removing the clip, place palm of the hand against the back of the bolt handle and thrust the bolt home with a quick motion, turning down the handle; turn the safety lock to the



Pl. 35, Par. 138.



Pl. 36, Par. 138.

“safe” and carry the hand to the small of the stock. *This position is designated for reference as that of load (standing).*

If kneeling, the position of the piece is similar, the left forearm resting on the left thigh.

If lying down, the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.

To Fire by Volley.

139. The pieces being loaded and in any position: 1. *At (so many) yards,* 2. *At (such object),* 3. *READY,* 4. *AIM,* 5. *Squad,* 6. *FIRE.*

At the first command, take the position of *load*, if not already there, and set the sight to the elevation designated; at the command *ready*, turn the safety lock to the “ready;” at the command *aim*, raise the piece with both hands and support the butt

firmly against the hollow of the right shoulder, right thumb inclined forward and diagonally to the left across the stock, barrel horizontal, left elbow well under the piece, right elbow as high as the shoulder; incline the head slightly forward and a little to the right, cheek against the stock, left eye closed, right eye looking through the notch of the rear sight so as to perceive the top of the front sight and object aimed at, second joint



Pl. 37, Par. 139.



Pl. 38, Par. 139.



Pl. 39, Par. 139.

of forefinger resting lightly against the front of the trigger, but not pressing it.

Each rear rank man aims through the interval to the right of his file leader, and leans slightly forward to advance the muzzle of his piece beyond the front rank.

In aiming kneeling, the left elbow rests on the left knee, point of elbow in front of kneecap.

In aiming lying down, raise the piece with both hands; rest on both elbows and press the butt firmly against the right shoulder.

At the command *fire*, press the finger against the trigger; fire without deranging the aim, and without lowering or turning the piece.

140. To continue the firing: 1. **LOAD**, 2. **AIM**, 3. **Squad**, 4. **FIRE**.

Each command is executed as previously explained except *load*, which is executed by lowering the piece from the shoulder, drawing back and thrusting home the bolt with the right hand, leaving the safety lock at the "ready."

Should the magazine become exhausted, *load* is executed with a new clip.

To Fire at Will.

141. 1. *Fire at will*, 2. *At (so many) yards*, 3. *At (such object)*, 4. **COMMENCE FIRING**.

At the command *commence firing*, each man, independently of the others, comes to the *ready*, takes careful aim at the object, fires, loads, and continues the fire, aiming deliberately and conducting his fire with all the care required on the rifle range.

Fire at will having been interrupted by the command *cease firing*, may be resumed at the same range and objective by the command: **COMMENCE FIRING**.

To Fire with Counted Cartridges.

142. 1. *Fire three (or other number) rounds*, 2. *At (so many) yards*, 3. *At (such object)*, 4. **COMMENCE FIRING**.

Executed as in the preceding paragraph, with the exception that on completion of the prescribed number of rounds each soldier executes *cease firing*.

Other rounds may be fired at the same range and objective by the command: 1. *Fire two (or other number) rounds*, 2. **COMMENCE FIRING**.

Rapid Fire.

143. This fire is used only when preparing for or resisting a charge. 1. *Rapid fire*, 2. **COMMENCE FIRING**.

The bayonets are fixed, the sights are set at point blank and the firing is executed as rapidly as consistent with effective aiming.

Owing to heat caused by continued firing, the barrel of the piece and metal parts in front of the chamber soon became too hot for handling; care should then be exercised to confine handling to the wooden parts and the metal parts in rear of the chamber.

144. **CEASE FIRING.**

The firing stops; pieces not already there are brought to the position of load, those not loaded are loaded, and all pieces locked.

This is intended to interrupt the firing, for the purpose of steadying the men, to change to another method of firing, or to retain the pieces loaded.

Having executed *cease firing*: 1. *Order*, 2. *ARMS*.

To Unload.

145. Being in any position: **UNLOAD.**

All take the position of load, turn the safety lock up and alternately open and close the chamber until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed by first thrusting the bolt slightly forward to free it from the stud holding it in place when the chamber is open, pressing the "follower" down and back to engage it under the bolt and then thrusting the bolt home; the piece is locked.

The cartridges are then picked up, cleaned, and returned to the box or belt and the piece brought to the order.

146. The rifle can be used as a single loader by turning the magazine "off." The magazine can be filled in whole or in part while "off" by pressing cartridges singly down and back until they are properly in place. The use of the rifle as a single loader is, however, to be regarded as exceptional.

The magazine when "on" can be filled in whole or in part without the use of the clip by pressing the cartridges down singly until held in place.

EXTENDED ORDER.

147. The man in front of whom the corporal places himself (No. 2 of the front rank) is the center and the guide of the squad, and follows in the trace of the corporal at a distance of three paces.

148. When the corporal does not wish the guide to follow him, he commands: *Guide center*, and indicates the point of direction;

if marching by the flank, he indicates the direction, or, moving abreast of the leading file, conducts the march.

149. Before giving commands for increasing or diminishing intervals, or assembling, the corporal indicates the file who is to be the base. This indication may be made by placing himself three paces in front of such file, or by oral designation.

On halting, the corporal places himself three paces in rear of his squad if it is acting alone. When the squad is in a line of squads the corporal is three paces in front whether marching or at a halt, and if deployed as skirmishers he is the left skirmisher.

150. The deployment as skirmishers is made on the front-rank man of the second file.

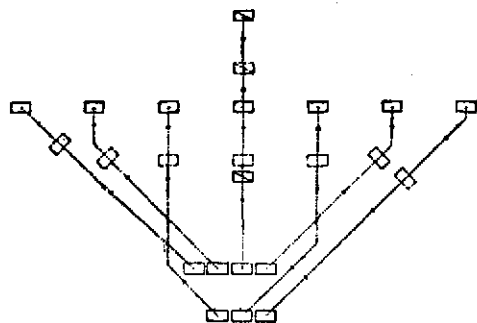
The rear-rank men place themselves on the alignment to the right of their file leaders, each, when there is interval.

To Deploy as Skirmishers.

151. Forward:

Marching in line: 1. *As skirmishers*, 2. **MARCH.**

Number two of the front rank moves straight to the front unless the corporal has indicated another direction, in which case he moves in such direction.



Pl. 40, Par. 151.

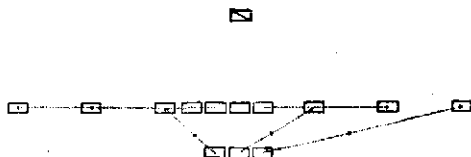
The other men oblique to the right or left, according as they are on the right or left of the second file, increasing the gait, each, when at his interval and on the alignment, resuming the direction and gait of the guide.

When the squad arrives on the line to be occupied, the corporal halts it by the commands: 1. *Skirmishers*, 2. **HALT.**

152. By the flank:

Being at a halt: 1. *As skirmishers*, 2. **MARCH.**

The base stands fast; the other men move rapidly to the right or left, according as they are on his right or left, each man halting on the line when he has gained his interval.



Pl. 41, Par. 152.

153. The squad in

any formation can be deployed as skirmishers and moved in any direction by the corporal moving in the desired direction and commanding: 1. *As skirmishers*, 2. **MARCH**; or, if practicable, the direction may be indicated in the preparatory command: 1. *As skirmishers to the right (right front, rear, etc.)*. Number two front rank follows the corporal, or moves in the indicated direction; all others take their positions on the line, moving by the shortest route and in the most expeditious manner.

To Increase or Diminish Intervals.

154. Being deployed as skirmishers: 1. *To (so many) paces, extend (or close)*, 2. **MARCH.**

The skirmishers open from or close toward the base.

If marching, the movement is executed by obliquing and increasing the gait; if at a halt, the movement is executed by the flank.

To Rally.

155. The rally, used when there is not time to form in normal order, should be made either on the line or in advance of it.

The corporal commands: **RALLY.**

The men run toward the corporal and group themselves in single or double rank, in line, in circle, in semicircle, or in such other formation as he directs, and then fix bayonet.

If the corporal continues to advance, the men form in rear of him in single or double rank as he directs and follow him, fixing bayonet.

The squad being rallied may advance or deploy; in deploying, the skirmishers return to their former places and unfix bayonet.

The Assembly.

156. Being deployed or rallied: 1. *Assemble*, 2. *MARCH*.

The men move toward the corporal and form in their proper places.

If the corporal continues to advance, the men move in double time, form, and follow him.

Assembling when faced or marching to the rear is not executed.

Normal Attack.

157. The corporal designates some well-defined object, as a tree, house, or target, that can be seen and recognized by all, distant about 1,200 yards.

He then causes the squad to load, puts it in march, deploys it as skirmishers, places himself about three paces in front of the guide, and halts at 1,000 yards from the objective; other halts are made at every 50 yards until he reaches a point 200 yards from the objective.

At each halt the corporal halts in person, and commands: 1. *Skirmishers*, 2. *HALT*.

The skirmishers halt abreast of the corporal, who steps aside to clear the guide who has been following in his trace, falls back to his place in rear and gives the commands for firing; one round at the first four halts, two rounds at the next four halts, and *fire at will* at the remaining halts until the last halt is reached, when the *rapid fire* is delivered and the squad follows the corporal in the charge.

The advance is made in quick time until within 800 yards, when the double time is used.

To correct errors, the company officer present frequently stays the execution of this drill; he sees that the men obey the restrictions against using cartridges unless specified in the command, lock pieces at completion of loading, *adjust the sights at the designated elevation, aim carefully, and fire deliberately*.

The commands of the corporal at the first four halts are: 1. *Fire one round*, 2. *At one thousand (nine hundred and fifty, nine hundred, eight hundred and fifty) yards*, 3. *COMMENCE FIRING*, 4. *CEASE FIRING*; at the next four halts they are similar, substituting *two rounds* for *one round* and changing the elevation to correspond with the range; at the next eight halts the first command is: *Fire at will*; at the last halt the command is: 1. *Rapid fire*, 2. *COMMENCE FIRING*.

Instruction on Varied Ground.

158. When the squad is fairly proficient in the normal attack, two or more instructed soldiers are used to outline an enemy, furnished with blank cartridges and instructed to fire upon the skirmishers whenever they are passing over or occupying exposed ground.

The company officer present posts these instructed men, takes the squad over the ground to be crossed, indicates the halting places, returns with the squad to the starting point 1,200 yards or more distant, and directs the corporal to make the attack.

This is carried out in the same manner as before except that, the halts being made with a view to effective fire upon the objective, the distances passed over between halts are variable.

The men are halted in the charge just before reaching the objective; or pass through the opposing line, each man passing to the right of the man in his front.

The Defense.

159. The instructor next causes the same drill to be repeated by two squads, both squads using blank cartridges and alternating in attack and defense.

The squad acting on the defensive so occupies a selected position as to be sheltered by natural cover, or constructs the necessary artificial cover.^a The other squad attacks and the squad acting on the defensive takes advantage of all favorable opportunities for delivering an effective fire upon the attacking squad; the men quickly rise from behind their cover sufficiently to see the objective and fire effectively; the corporal gives and the men use the proper elevation.

160. The different drills as outlined above, carried out on different portions of the available ground and in different directions over the same ground, are continued until the recruit is sufficiently advanced to receive instruction in the School of the Company.

^aThe principles of preparation of cover are found in the authorized Manual of Field Engineering.

PITCHING TENTS.***Single Shelter Tents.***

570. The captain causes the company to stack arms, dresses it back to four paces from the stacks and commands: ***Form for shelter tents.***

The officers fall out, the first sergeant falls in as rear rank man of the right file composed of himself and right guide; blank files are filled by the file closers or by men taken from the front rank; the remaining file closers fall in on the left.

The captain then commands: 1. ***To the left (right) take shelter tent intervals,*** 2. ***MARCH,*** 3. ***Company,*** 4. ***HALT,*** 5. ***FRONT,*** 6. ***PITCH TENTS.***

At the command ***march,*** all face to the left and move off in succession, the front and rear rank men alternating. Each rear rank man places himself in rear of his front rank man in a single column; as the line is being extended, each man grasps with his left hand the right wrist of the man in front.

If intervals are taken to the right, the front rank man of each file follows his rear rank man, and each man grasps with his right hand the left wrist of the man in front.

At the command ***halt,*** given as the second man from the right has his interval, all halt, face to the front, dress to the right and correct their intervals by moving to the left until the arms are fully extended.

At the command ***front,*** all drop their hands.

At the command ***pitch tents,*** each rear rank man moves back to four paces in rear of his front rank man; all unsling and open the blanket rolls and take out the shelter half, poles and pins; the front rank man places one pin in the ground at the point where his right heel, kept in position until this time, was planted. Each then spreads his shelter half, triangle to the rear, flat upon the ground the tent is to occupy, rear rank man's half on the right. The halves are then buttoned together. Each front rank man joins his pole, inserts the top in the eyes of the halves and holds the pole upright beside the pin placed in the ground; his rear rank man, using the pins in front, pins down the front corners of the tent on the line of pins, stretching the canvas taut; he then inserts a pin in the eye of the rope and drives the pin at such distance in front of the pole as to hold the rope taut. Both then go to the rear of the tent; the

rear rank man adjusts the pole and the front rank man drives the pins. The rest of the pins are then driven by both men, the rear rank man working on the right.

As soon as the tent is pitched, each man arranges the contents of the blanket roll in the tent, and stands at attention in front of his own half on line with the front guy rope pin.

The guy ropes, to have a uniform slope when the shelter tents are pitched, should all be of the same length.

571. Shelter tents are pitched by a squad or platoon in the same manner as by a company.

Double Shelter Tents.

572. The double shelter tent is formed by buttoning together the square ends of two single tents. Two complete tents, except one pole, are used. Two guy ropes are used at each end, the guy pins being placed in front of the corner pins.

The double shelter tents are pitched by Nos. 1 and 2, front and rear rank; and by Nos. 3 and 4, front and rear rank; the men falling in on the left are numbered, counting off if necessary.

The captain gives the same commands as before, inserting *double* before *shelter* in the first command, and before *tents* in the last command.

The commands are executed in the same manner as when pitching single shelter tents, with the following exceptions:

Only the front rank grasp wrists; the rear rank cover their file leaders at 6 paces distance.

The first sergeant places himself on the right of the right guide and with him pitches a single shelter tent.

Only the odd numbers of the front rank mark the line with the tent pin.

All the men spread their shelter halves on the ground the tent is to occupy. Those of the front rank are placed with the triangular ends to the front. All four halves are then buttoned together, first the ridges and then the square ends. The front corners of the tent are pinned by the front rank men, the odd number holding the poles, the even number driving the pins. The rear rank men similarly pin the rear corners.

While the odd numbers steady the poles, each even number of the front rank takes his pole and enters the tent where, assisted by the even number of the rear rank, he adjusts the pole

to the center eyes of the shelter halves in the following order: 1st, the lower half of the front tent; 2d, the lower half of the rear tent; 3d, the upper half of the front tent; 4th, the upper half of the rear tent. The guy ropes are then adjusted.

The tents having been pitched, the triangular ends are turned back, contents of the rolls arranged, and the men stand at *attention*, each opposite his own shelter half and facing out from the tent.

573. To pitch single or double shelter tents by battalion, the major causes the right (left) guides to cover, dresses the battalion on the covering guides and commands: 1. *Pitch (double) tents.* Each captain causes his company to pitch tents by the same commands and in the same manner as previously described.

To Strike Shelter Tents.

574. Arms having been stacked and everything removed from the tents: 1. *Strike tents*, 2. *DOWN*, 3. *To the right (left) assemble*, 4. *MARCH.*

At the first command, the side pins are removed; the front rank man steadies the front pole, the rear rank man the rear pole, and all remaining pins are removed.

At the second command, or last note of *the general*, the tents are lowered, blanket rolls packed and slung, and the men stand at attention in front and rear of the places lately occupied by their tents at their original places after extension.

At the fourth command, they close in to the right and reform company.

Common and Wall Tents.

575. Four men, numbered from 1 to 4 consecutively, pitch each tent.

Nos. 1 and 2 place the ridgepole perpendicular to the company street, with one end against the position pin; Nos. 3 and 4 drive a pin at the other end of the ridgepole. Nos. 1 and 2 mark the positions of the four corner guy rope pins by placing the ridgepole parallel to the company street, to the right (facing the tent) of the position pin; Nos. 3 and 4 drive a large pin 1 pace in front of the outer end of the ridgepole. The other three corner guy pins are set in succession in the same manner, going first straight to the rear, then across the tent and then to the front. All four then spread the tent on the

ground it is to occupy; Nos. 1 at the front and 2 at the rear insert the uprights. The ridgepole and uprights are joined, the pole pins inserted in the eyelets of the tent and fly and the tent raised to a vertical position with the poles at the pins. Nos. 1 and 2 hold the tent in position; No. 3 places the front guy ropes of tent and fly; No. 4, the rear, on their pins, and tighten the same so as to hold the poles vertical. The wall pins are then driven through the loops, walls hanging vertically. The other pins are then driven on line with the corner pins and in prolongation of the seams of the tent.

Conical Wall Tents.

576. The conical wall tent is pitched by a squad. The corporal numbers the privates from 1 to 7, and superintends the work.

Upon the hood lines of the tent are placed three marks; the first about 8 feet 3 inches, the second about 11 feet 3 inches, the third about 14 feet 2 inches from the hood ring; the first marks the distance from the center to the wall pins, the second to the guy pins, and the distance between the second and third is the distance between guy pins. These distances vary slightly for different tents and should be verified by actual experiment before permanently marking the ropes. To locate the position of guy pins after the first, the hood ring being held on the center pin, with the left hand hold the outer mark on the pin last set, with the right hand grasp the rope at the center mark and move the hand to the right so as to have both sections of the rope taut; the center mark is then over the position desired; the inner mark is over the position of the corresponding wall pin.

To pitch the tent, No. 1 places the tent pole on the ground, socket end against the door pin, pole perpendicular to the company street. No. 2 drives the center pin at the other extremity of the pole. No. 3 drives a wall pin on each side of and 1 foot from the door pin. No. 4 places the open tripod flat on the ground with its center near the center pin. The whole squad then places the tent, fully opened, on the ground it is to occupy, the center at the center pin, the door at the door pin.

The noncommissioned officer holds the hood ring on the center pin, and superintends from that position. No. 1 stretches the hood rope over the right (facing the tent) wall pin and No. 2

drives the first guy pin at the middle mark. No. 1 marks the position of the guy pins in succession and No. 2 drives a pin lightly in each position as soon as marked. At the same time No. 5 inserts small pins in succession through the wall loops and places the pins in position against the inner mark on the hood rope, where they are partly driven by No. 6. No. 4 distributes large pins ahead of Nos. 1 and 2; No. 7, small pins ahead of Nos. 5 and 6; No. 3 follows Nos. 1 and 2 and drives the guy pins home. No. 7, after distributing his pins, takes an axe and drives home the pins behind Nos. 5 and 6. No. 4, after distributing his pins, follows No. 3 and loops the guy ropes over the pins.

Nos. 1, 2, and 3, the pins being driven, slip under the tent and place the pin of the pole through the tent and hood rings while the noncommissioned officer places the hood in position. Nos. 1, 2, and 3 then raise the pole to a vertical position and insert the end in the socket of the tripod; they then raise the tripod to its proper height, keeping the center of the tripod over the center pin; while they hold the pole vertical Nos. 4, 5, 6, and 7 adjust four guy ropes, one in each quadrant of the tent, to hold the pole in its vertical position, and then the remaining guy ropes. As soon as these are adjusted the men inside drive a pin at each foot of the tripod if necessary to hold it in place.

To Strike Common, Wall, and Conical Wall Tents.

577. 1. Strike tents, 2. DOWN.

The men first remove all pins except those of the four corner guy ropes, four quadrant guy ropes in case of the conical wall tent. The pins are neatly piled or placed in their receptacle.

One man removes each guy from its pin and all hold the tent in a vertical position until the command *down*, or the last note of *the general*, and then lower it to the indicated side.

The canvas is then folded, or rolled, and tied; the poles, or tripod and pole, fastened together, and the remaining pins collected.

To Fold Tents.

578. Wall tents: Spread the tent flat on its side and place all guys but two over on the canvas; fold the triangular ends over so as to make the canvas rectangular; fold both ends over so that they meet at the center and then fold one end over on the

other; fold the bottom and ridge over so that they meet at the center of the strip, and then fold one end over on the other.

Fold the fly into four folds, parallel to its length, then in a similar manner across its length, making a rectangle with dimensions about the same as the folded tent.

Place the fly on the tent, cross the two free guys and tie them so that they pass over the ends and across the sides.

The hospital and common tent are folded in the same manner as the wall tent.

Conical wall tents: Spread the tent flat with the door up; holding the ring vertical, fold the two edges in so they meet at the center and again fold in the same manner; place the hood on one half and fold the other half over on it; turn wall over toward ring, fold coming at about middle of height of wall; two men working together then roll from the ring down, placing knees on each fold to make bundle compact and flat.

Tie the bundle with the two free guys as in case of the wall tent.

General Remarks.

579. As soon as the lines of company streets are established the positions of the tents should be marked from the flank nearest the officers' tents, by pins. The front pole of the wall and common tent and the door pins of the conical wall tents occupy the points so marked. The distance between pins may be determined by pacing or by a light cord with the distances marked upon it. These distances are: for wall tents, 8 paces; common tents, 6 paces; conical wall tents, 10 paces. The pins marking the position of the tents are, when practicable, set on a straight line, and the company officers verify and correct the alignment of such pins in the quickest and most convenient manner.

580. Wall pins are so driven as to slope slightly away from the tent; guy pins, so as to slope slightly toward the tent.

581. Each tent, its fly, hood, poles, and tripod, should have the same number.

582. The conical wall tent complete consists of one tent and hood, 76 pounds; one tent pole and tripod, 32 pounds, forty-eight pins, about 20 pounds; total weight, 128 pounds. Its dimensions are: Diameter, $16\frac{1}{2}$ feet; height, 10 feet; height of wall, 3 feet; packed, contains 13 cubic feet.

583. The wall tent complete consists of one tent, 43 pounds; one fly, 15 pounds; one set poles, 25 pounds; ten large and

eighteen small tent pins, about 15 pounds; total weight, 98 pounds. Its dimensions are: Length of ridge, 9 feet; width, 8 feet 11 inches; height, $8\frac{1}{2}$ feet; height of wall, 3 feet 9 inches; packed, contains 6 cubic feet.

584. The common tent complete consists of one tent, 26 pounds; one set poles, 15 pounds; twenty-four small tent pins, weight about 9 pounds; total weight, 50 pounds. Its dimensions are: Length of ridge, 6 feet 11 inches; width, 8 feet 4 inches; height, 6 feet 10 inches; height of wall, 2 feet.

585. The shelter tent equipment for each enlisted man consists of the following:

(a) One shelter half, weight 3 pounds.

(b) One pole in three joints, 47 inches long; weight, $10\frac{1}{2}$ ounces.

(c) Five tent pins, 9 inches long; weight, 10 ounces.

The shelter tent is pitched by two men, whose combined equipments make a complete tent. The tent when pitched, occupies a space 5 feet 4 inches deep and 6 feet 4 inches wide; the two triangular parts, when pinned to the ground, enclose an additional triangular ground space 20 inches deep.

586. In striking tents, common and wall tents are, unless otherwise directed, lowered to the right facing out from the tent door; conical wall tents, away from the door.

MANUAL OF BAYONET EXERCISES.

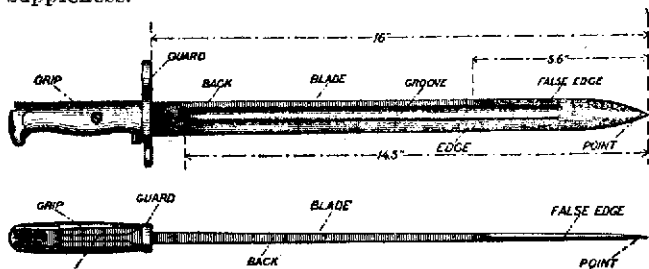
UNITED STATES ARMY.

(Provisional, 1907.)

1. The infantry soldier relies mainly on fire action to disable the enemy, but he should know that personal combat is often necessary to complete the success and he must therefore be instructed in the use of the bayonet.

Instruction in the use of the bayonet.

2. The object of this instruction is to teach the soldier how to make effective use of the bayonet in battle; to make him quick and proficient in handling his piece; to give him confidence in the bayonet in offense and defense; to give him an accurate eye, a steady hand, and to increase his muscular development and suppleness.



Pls. 1 and 2, Pars. 3 and 4.

THE BAYONET.

Nomenclature and description.

3. The bayonet is a cutting and thrusting weapon consisting of three principal parts, viz, the *blade*, *guard* and *grip*.

4. The blade has the following parts: Edge, false edge, back, grooves, point and tang. The length of the blade from guard to point is 16 inches. The edge is 14.5 inches, and the false edge 5.6 inches. Length of rifle, bayonet fixed, is 59.4 inches. The weight of the bayonet is 1 pound; weight of rifle without bayonet is 8.69 pounds. The center of gravity of the rifle, with bayonet fixed, is just in front of the rear sight.

5. Officers and specially selected and thoroughly instructed noncommissioned officers will be used as instructors.

DEFINITIONS.

6. *Distance* is the term applied to the amount of space separating two combatants.

7. *Opposition* results from pressure against the opposing blade, the object being to offer or procure an opening.

8. *Feints* are simulated cuts, lunges, or thrusts made with a view of inducing a parry and uncovering the real point of attack. They are single, double, etc., according to the number of movements.

9. The *return* is the counter attack, made instantly after or in continuation of a parry.

10. *The directing line* is the imaginary line passing through the left heels of the combatants.

11. The instruction is first given to groups of from four to eight men in one line with necessary intervals. In preliminary instruction the position of guard is resumed, by command, after each movement. When the men have become proficient the instructor will cause them to resume guard without command.

12. Instruction is first given on even ground. As the soldier becomes proficient he is taught to handle himself on all kinds of ground and to carefully observe its character. Care is taken that the feet are raised only high enough to clear obstructions.

13. The instructor explains the importance of good foot work and impresses on the men the fact that quickness of foot and suppleness of body are as important for attack and defense as ability to parry and deliver a strong point or cut.

14. Short and frequent drills are preferable to long ones. Care will be taken to prevent wearing the men out by keeping them in one position for too long a time. Frequent rests are necessary.

15. The principles of the commands are the same as given in paragraphs 4, 8, 12, 14, and intervals and distances will be taken according to the principles of paragraphs 101 and 102, Infantry Drill Regulations. As soon as the movements are executed accurately the commands are given rapidly, expertness with the bayonet depending chiefly on quickness of motion.

16. The course of instruction is divided as follows:

1. Without the rifle.
2. With the rifle.
3. At will.

1. INSTRUCTION WITHOUT THE RIFLE.

17. These movements are the foundation of the instruction, and should for that reason be thoroughly understood and executed with precision and snap before any others are attempted.

18. The men being in line with 4-pace intervals, the instructor commands, 1. *Bayonet exercise*, 2. *GUARD*.

At the command *guard*, half face to the right, carry back and place the right foot about twice its length to the rear and about 3 inches to the right, left foot pointing to the front, the feet forming with each other an angle of about 60°, both knees slightly bent, weight of body held equally on both legs, palms of hands on hips, fingers to the front, thumbs to the rear, head erect, head and eyes straight to the front.

19. To resume the attention, 1. *Squad*, 2. *ATTENTION*. The men take the position of the soldier and fix their attention.

20. Being at *guard*: *Ad-VANCE*.

Advance the left foot quickly about once its length, follow immediately with the right foot for the same distance.

21. *Re-TIRE*.

Move the right foot quickly to the rear about once its length, follow immediately with the left foot the same distance.

No hard and fast rule can be laid down as to the length of the advance or retire; it depends entirely on circumstances and the distance from the objective.

22. 1. *Front*, 2. *STEP*.

Bring the right heel in line with the left heel and advance the left foot to the position of guard.

23. 1. *Rear*, 2. *STEP*. Bring the left heel in line with the right heel and retire the right foot to the position of guard.

24. The front step is used to quickly get within striking distance. It should be used cautiously. The rear step carries the left leg and lower part of the body out of striking distance. The left foot only may be drawn back to avoid an attack and again advanced to position of guard.

25. 1. *Front*, 2. *PASS*.

Place the right foot quickly about once its length in front of the left, advance the left foot to its proper position in front of the right.

26. 1. *Rear*, 2. *PASS*.

Place the left foot quickly about once its length in rear of the right, retire the right foot quickly to its proper position, in rear of left.

The passes are used to quickly get within striking distance or to open a dangerously close distance.

27. 1. *Right*, 2. *TRAVERSE*.

Step to the right with the right foot about once its length and place the left foot in its proper position.

28. 1. *Left*, 2. *TRAVERSE*.

Step to the left with the left foot about once its length and place the right foot in its proper position.

The traverses are used to circle around an enemy, to secure a more favorable line of attack, or to avoid the opponent's attack. Better ground or more favorable light may be gained in this way. Consequently, when facing an opponent the movement is not necessarily at right angles to the directing line.

29. 1. *Right (or left)*, 2. *VOLT*.

Face to the right, turning on the ball of the left foot; at the same time carry the right foot quickly to its proper position in rear of the left.

30. Right rear and left rear volts are similarly executed, facing about on the ball of the left foot in each case.

31. *THRUST*.

Straighten the right leg vigorously and throw the weight of the body forward and on the left leg, the ball of the right foot always on the ground.

32. *LUNGE*.

Executed the same as the thrust, except that the left foot is carried forward about once and a half its length. The left heel must always be in rear of the left knee.

II. INSTRUCTION WITH THE RIFLE.

33. The commands for and the execution of the foot movements are the same as already given for movements without the rifle.

34. The men being in line at intervals of 4 paces, with bayonets fixed, the instructor commands:

1. *Bayonet exercise*, 2. *GUARD*.

At the second command take the position of guard (see par. 18); at the same time throw the piece smartly to the front,



Pl. 3, Par. 34

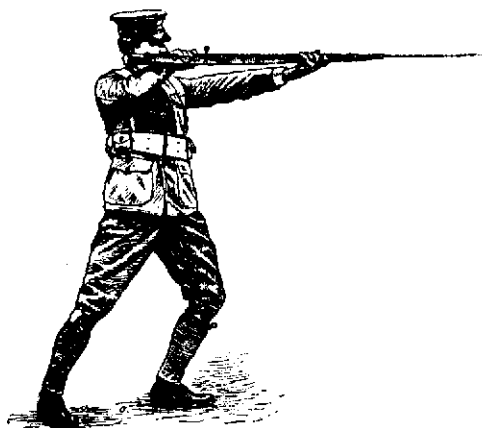
grasp the rifle with the left hand just above the lower band, left arm nearly extended, elbow down, barrel to the left, blade flat, the right hand grasping the small of the stock at the height of the waist, elbow free from the body, the stock outside of the forearm, bayonet point the height of the chin, eyes on the bayonet point. Both hands grasp the rifle firmly, but without straining.

35. 1. Order, 2. ARMS.

Bring the right foot up to the left foot and resume the position of attention, at the same time bringing the rifle to the position of order arms.

36. 1. THRUST.

As in paragraph 31, at the same time drive the piece forcibly to the front with the right arm, barrel to the left. Butt at the height of the chin and outside right forearm. Both hands supporting the piece. Point of bayonet at height of point attacked.



Pl. 4, Par. 36.

37. LUNGE.

Executed as in paragraphs 32 and 36.

Do not overthrust or overlunge, but keep the body under control.

38. 1. Right (or left), 2. PARRY.

Keeping the right hand in the guard position move the piece sharply to the right with the left arm so that the bayonet point is about 6 inches to the right, checking the rifle on completion

of the parry and bringing it back instantly to the position of guard. This parry covers the right side.



Pl. 5, Par. 37.

**39. 1. Right low (or left low),
2. PARRY.**

Extend the left arm and carry the point of the bayonet down until it is at the height of the right knee, moving the point of the bayonet sufficiently to the right to keep the opponent's attack clear of the point attacked. The low parries are rarely used, as an attack below the waist leaves the head and body exposed.

40. Parries must not be too wide or sweeping, but sharp, short motions finished with a jerk or quick catch.

41. The guard, parries, lunges, or thrust can be executed to the right, left, or rear by means of the volts. In executing the



Pl. 6, Par. 39.

volts make a strong sweep with the rifle; but if there is danger of wounding a comrade the piece should be first brought to a vertical position.

42. 1. *Right (or left)*, 2. *CUT*.

Draw the bayonet slightly to the left, and with a quick extension of the arms execute a cut to the right, directing the edge toward the point attacked. The cuts are especially useful against the hands or arms of an enemy. In executing left cut remember that the false, or back, edge is only 5.6 inches long. The cuts can also be executed in connection with thrusts and lunges.

43. The guard against cavalry is similar to the guard prescribed in paragraph 34, except that the knees are almost straight and the point of the bayonet is higher.

44. The parries, thrusts, and lunges against cavalry are executed as previously explained, except that the attack and defense are higher.

45. The following are useful when fighting at close quarters and it is impossible to use the whole piece to advantage.

46. 1. *Butt*, 2. *FRONT*.



Pl. 7, Par. 46.

Raise the piece nearly vertical and bring it back, barrel in hollow of the right shoulder, straighten right leg, and bring the butt up with a strong sweep.

47. 1. *Butt*, 2. *RIGHT*.



Figs. 8 and 9, Par. 47.

Raise the piece with both hands, barrel down and horizontal; point of bayonet to the left, head and eyes to the right, right hand opposite left of neck; strike to the right.

48. 1. Butt, 2. REAR.

Turn to the right on both heels. Raise the piece with both hands, barrel down, and horizontal; head and eyes to the rear, right hand opposite left of neck, strike to the rear, at the same time straighten the left leg.

49. 1. Butt, 2. LEFT.

Execute a left volt followed by butt front.

50. To thrust or lunge from a parry, first give the command for the parry, then quickly follow with the command for the thrust or lunge.



PL. 10, Par. 48.

51. When the soldier is thoroughly familiar with the different foot movements, parries, thrusts, lunges, cuts, and blows, the instructor combines several of them by giving the commands in quick succession, increasing the rapidity and number of movements in combination as the men become more skillful.

52. During preliminary instruction attack and defense will be executed from guard until proficiency is attained, when they can be practiced from *any* position.

53. Good judgment of distance is essential. This will be taught by practicing the

various thrusts, lunges, and blows, in combination with the foot movements, at a mark or dummy.

54. In order that intelligent instruction in the assault can be given, it is necessary to give preliminary instruction in the methods of combining the various thrusts, lunges, returns, feints, etc.

55. Bayonet exercises in two lines consist principally of combinations of thrusts, parries, and leg movements executed at command, the opponent replying with suitable parries and returns.

56. For this instruction each company is furnished with fencing muskets, masks, plastrons, right and left hand gloves.

57. The instructor will inspect the entire fencing equipment before the exercises begin and assure himself that everything is in such condition as will prevent accidents. Special care will be taken to see that the bayonet points are properly protected and that the masks and plastrons are safe.

58. The men, equipped as above, are formed in two lines at the order, facing each other, with intervals of about 4 paces between files and a distance of about 2 paces between lines. One line is designated number 1; the other, number 2. The instructor will cause the corresponding files to take position exactly opposite each other.

59. 1. *Prove*, 2. *DISTANCE*.

The numbers one will thrust slowly at the breasts of numbers two, who will retire or advance until the points of their opponent's bayonets are about 9 inches from their breasts. The order is then resumed. The distance between opponents is very important, as it is complicated by the position of the left hand and arm in the attack and guard. The safest working distance is with bayonets engaged and a constant readiness to advance or retreat.

60. 1. *Bayonet exercise*, 2. *Right (or left)*, 3. *GUARD*.

At the command *guard*, executed as in Par. 34, the bayonets are crossed about 6 inches from the point, the edges in contact. This position is designated *right guard*. If the false edges are in contact the position is designated as *left guard*.

61. To change from one guard to another, the instructor commands:

1. *Number 1 (or 2)*, 2. *Right (or left)*, 3. *GUARD*.

The number designated lowers his point quickly until it clears his adversary's bayonet and then raises smartly on the opposite side.

62. 1. *Number 1 (or 2)*, 2. *Double*, 3. *GUARD*.

The number designated changes from one guard to the other and quickly resumes the original guard.

63. If the opponent's point is low the bayonet may be passed over his point to prevent lowering your own point too much out of line.

64. The instructor explains that the attacking line must try to hit with the particular attack ordered; the defending line to parry and return the attack, if possible.

65. If the attack is to be directed between the head and hips it will be designated *right or left high thrust, lunge, or cut*, according

to the direction of the attack. If the attack is to be directed below the hips it will be designated *right or left low*, according to its direction. The parries are designated accordingly.

66. After some practice with right, left, and double guard, the following exercises will be given and varied as the instructor directs:

1. *Number one*, 2. $\left\{ \begin{array}{l} \textit{Right High Thrust, Lunge, or Cut,} \\ \textit{Left High Thrust, Lunge, or Cut,} \\ \textit{Right Low Thrust, Lunge, or Cut,} \\ \textit{Left Low Thrust, Lunge, or Cut,} \end{array} \right\}$ 3. **ASSAULT.**

Number one executes the thrust or lunge or cut, and number two parries; conversely, at command, number two thrusts, lunges, or cuts and number one parries.

67. In order to draw the adversary out and induce him to expose that part of the body at which the attack is to be made, it is advisable to simulate an attack by a feint and then make the real attack by the shortest possible movement. The instructor may command: 1. *Number one*, 2. *Feint Right High Thrust, or Cut*, 3. *Left High Lunge, Thrust, or Cut*, 4. **ASSAULT.**

Number one executes the feint and then the attack. Number two executes both parries.

68. In double feints first one part of the body and then another is threatened and a third attacked. No great force is put in a feint in order that the attack may be quickly changed. An opening may be offered or procured by opposition.

Returns.

69. At this stage the instructor will introduce combinations involving the return or counter-attack. With beginners all movements will be explained to the extent deemed necessary and then executed at the command *assault*.

70. Return attacks should be frequently practiced, as they are difficult to parry and the opponent is within easier reach and more exposed. The return can be made a continuation of the parry, and there is no previous warning of its delivery, although it should always be expected. Returns are made without lunging if the adversary can be reached.

71. Commencing with simple combinations, the instruction will progress to the more complicated; for example:

1. *Number one, 2. Right High Lunge, Thrust, or Cut, 3. Number two, 4. Return Left High Lunge, Thrust, or Cut, 5. ASSAULT.*

Number one executes the attack ordered, number two parries and immediately returns the attack ordered, both numbers resume guard. In these exercises the endeavor is made to deliver the return before the one making the attack can recover from the attack and parry the return.

72. When the men have become thoroughly familiar with the various foot movements, parries, guards, attacks, feints, etc., the instructor combines several of them and gives the commands in quick succession, increasing the rapidity and number of movements as the men become more skillful. Opponents will be frequently changed.

73. When the different combinations are executed with sufficient skill, the instructor will devise courses at arms to be memorized and executed at the command *assault*. The accuracy and celerity of the movements will be carefully watched by the instructor, with a view to correction of faulty execution.

74. It is not the intention to restrict the number of movements, but to leave to the discretion of company commanders and the ingenuity of instructors the selection of such other exercises as accord with the object of the drill.

At will.

75. Satisfactory progress having been made, the instructor will proceed to the exercises at will, by which is meant assaults between two men, each endeavoring to hit the other and to avoid being hit himself. This object will generally be best accomplished by performing the various movements in the manner prescribed.

76. The instructor can supervise only one pair of combatants at a time. Frequent changes should be made so that the men may learn from each other. A strong and skillful opponent will inspire caution, whereas with a weaker one more vigorous action will be possible, and the recognized superiority will impart coolness and confidence.

77. The assault should simulate as closely as practicable the conditions of actual combat, and should be entered into with caution, the guard being assumed before the adversary comes within reach.

78. The contest should begin with simple, careful movements, with a view to forming a correct opinion of the adversary; afterwards everything will depend on quick perception of the adversary's intentions, coolness, and rapid and correct execution of the movements.

Continual retreat from the adversary's attack and frequent dodging to escape attacks should be avoided.

79. The combat must not begin until the instructor commands *assault*, after which either party has the right to attack. To stop the contest the instructor will command *HALT*, at which the combatants will immediately come to the order and then remove their masks.

80. The instructor will closely observe the contest and decide doubtful points. He will at once stop the assault upon the slightest indication of temper. After conclusion of the combat he will comment on the action of both parties, point out errors and deficiencies, and explain how they may be avoided in future.

Rules for exercises at will.

81. When it is necessary to stop the contest—for example, because of breaking of weapons or displacement of means of protection—take the position of the order.

b. After receiving a fair hit a return is not permitted.

c. Do not attack until the adversary is ready and in condition to defend himself.

d. Upon receiving a hit call out "hit"; grazing hits do not count, except with the edge or false edge. No hit counts unless, in the opinion of the instructor, it had sufficient force to disable.

Hints for instructors.

82. All the prescribed movements, both simple and in combination, must be executed with the greatest precision.

83. The influence of the instructor is great. He must be master of his weapon, not only to show the various movements, but also to lead in the exercises at will. He should stimulate the zeal of the men and arouse pleasure in the work.

84. The character of each man, his bodily conformation, and his degree of skill must always be taken into account. When the instructor is demonstrating the combinations, feints, returns, and parries, the rapidity of his attack should be regulated by the skill of the pupil, and no more force than is necessary

should be used. If the pupil exposes himself too much in the feints and parries, the instructor will, by an attack, convince him of his error; but if these returns be too swiftly or too strongly made the pupil will become too cautious and the precision of his attack will be impaired. The object is to teach the pupil not to give exhibitions of superior skill.

85. Occasionally the instructor should leave himself uncovered and fail to parry, in order to teach the pupil to take quick advantage of such opportunities.

PRACTICAL BAYONET FIGHTING.

86. When engaging in an assault, first study the adversary's position and proceed by false attacks, executed with speed, to discover, if possible, his instinctive parries. These false attacks should be given the appearance of real attacks, without, however, coming within reach of the opponent's bayonet.

87. When confronted by one who rushes, it is best to retreat until he is under the impression that that is your defense, then wait for the next rush and pin him at the very beginning.

88. Aim at the most exposed part of the body, his left arm, and if that can not be reached by a direct attack, endeavor to mislead him by making a distinct feint at some part of the body, the parry for which exposes the arm, and then cut at the arm with the true or false edge of the bayonet.

89. Deliver your attacks promptly and keep your body well covered. Always maintain a firm opposition and keep your own line of attack well covered.

90. Endeavor to overcome the tendency of making a return without knowing where it will hit. Making returns blindly is a bad habit and leads to instinctive returns—that is, habitually returning with certain attacks from certain parries—a condition which the skilled opponent will not be long in discovering.

91. In the position of guard the left hand and arm are more or less exposed to attack. If the bayonet of an opponent is also a cutting weapon, the left hand and arm are particularly exposed, and if attacked should be quickly shifted toward the trigger guard, supporting the piece until the guard can be resumed, or the rifle can be withdrawn sufficiently to avoid the attack. Constantly watch for a chance to attack the opponent's left hand. His position will not differ materially from the position of guard. If his bayonet is pointed only, he will be at a great dis-

advantage. Observe the ground and its obstructions. As soon as your opponent is on guard watch his bayonet and piece. Thrust and lunge home. Never draw back the piece preparatory to attacking.

92. The butt is used for close and sudden attacks when it is impracticable to use the bayonet. From the position of port arms a sentry can strike a severe blow with the butt of the piece.

93. It will seldom be possible to hit an experienced opponent by direct attack, and results will more likely be secured by a deception or counter attack. The weight and balance of a rifle with fixed bayonet are such that complicated and intricate movements can not be successfully attempted. *The point of the bayonet should always be kept as nearly in the line of attack as possible.* Cuts with the bayonet can be made very strong, and their use in feints and returns will necessitate parrying on the part of an opponent. It is sometimes possible to press an opponent's piece to one side and make a direct attack. If the opponent uses a system of defense in which the hand grips are insecure or the point moved much out of line, it is not difficult to hit him by a feint or a return or even knock his piece from his hands. After an attack has been made resume the guard as quickly as possible, whether a hit has been made or not. If the opponent's point is low or far out of line, an attack at the head or face is possible and very effective.

94. Always be prepared for feints and returns. Do not over-parry or parry too soon. Use parries as much as possible when attacked, but always be ready to retreat if necessary. Against a man on foot with a sword be careful that the muzzle of your piece is not grasped. All the swordsman's energies will be directed toward getting inside the bayonet. Attack him frequently with short, stabbing thrusts, being careful to keep him at a distance at all costs.

95. In fighting a mounted man armed with a sword every effort must be made to get on his near or left side, because here his reach is much shorter and his parries weaker. If you can not disable the enemy, attack his horse and then renew your attack on the horseman.

96. To sum up: Keep cool; study your adversary and try to discover his game; watch for opportunities and make instant use of them. If you know the adversary's game, take advantage of it; if not, try to make him play yours.

EXTRACTS FROM THE MANUAL OF GUARD DUTY.

UNITED STATES ARMY, 1908.

[The numbers refer to paragraphs in the Manual.]

ROSTERS AND DETACHMENTS.

1. A roster is a list of officers or men for duty, with a record of the duty performed by each. Generally, details for duty are so made that the one longest off is the first for detail. Details so made are said to be made by roster. (A. R., 361.)

2. All details for service in garrison and in the field, except the authorized special and extra duty details, will be by roster; but officers or enlisted men when detailed must serve whether a roster be kept or not. (A. R., 362.)

17. At every military post, and in every regiment or separate command in the field, a post or camp guard will be detailed and duly mounted. It will consist of such number of officers and enlisted men as the commanding officer may deem necessary. It will be commanded by the senior officer or noncommissioned officer on duty therewith, under the supervision of the officer of the day. (See par. 45.)

36. When practicable, each first sergeant publishes at retreat all the details made from the company. He will also post them on the company bulletin board.

THE COMMANDING OFFICER.

47. If necessary or expedient, the commanding officer may require that no person shall pass a sentinel's post unless passed by an officer or noncommissioned officer of the guard; he should also prescribe how and where soldiers and others shall enter or leave the post or camp.

COMMANDER OF THE GUARD.

63. The senior officer or noncommissioned officer of the guard is commander of the guard.

64. The commander of the guard is responsible for the instruction and discipline of the guard. He will see that all its members are correctly instructed in their orders and duties, and that they understand and properly perform them. He will visit each relief at least once while it is on post, and at least one of these visits will be made between 12 o'clock midnight and daylight.

71. If a sentinel calls: "*The Guard*," the commander of the guard will at once send a patrol to such sentinel's post. If the danger be great, in which case the sentinel will discharge his piece, the patrol will be as strong as possible.

89. He will see that the orders for each sentinel, either written or printed, are posted in the guardhouse, and, if practicable, in the sentry box or other sheltered place to which the sentinel has constant access. (See par. 42.)

92. He will, when the countersign is used, communicate it to the noncommissioned officers of the guard and see that it is duly communicated to sentinels before the hour for challenging; the countersign will not be given to sentinels posted at the guardhouse.

94. The commander of the guard may permit members of the guard while at the guardhouse to remove their headdress, overcoats, and gloves; if they leave the guardhouse for any purpose whatever, he will require that they shall be properly equipped and armed according to the character of the service in which engaged, or as directed by the commanding officer.

SERGEANT OF THE GUARD.

115. The senior noncommissioned officer of the guard always acts as sergeant of the guard, and, if there be no officer of the guard, will perform the duties prescribed for the commander of the guard.

131. At night the roll may be called by reliefs and numbers instead of names; thus, the first relief being on post: *Second relief, Corporal; No. 1; No. 2, etc. Third relief, Corporal; No. 1, etc.*

CORPORAL OF THE GUARD.

143. Corporals of the guard are assigned to reliefs by the commander of the guard.

144. A corporal of the guard receives and obeys orders from none but noncommissioned officers of the guard senior to himself, the officers of the guard, the officer of the day, and the commanding officer.

145. It is the duty of the corporal of the guard to post and relieve sentinels, and to instruct the members of his relief in their orders and duties.

146. Immediately after the division of the guard into reliefs the corporals will assign the members of their respective reliefs to posts by number, and a soldier so assigned to his post will not be changed to another during the same tour of guard duty, unless by direction of the commander of the guard or higher authority. Usually, experienced soldiers are placed over the arms of the guard, and at remote and responsible posts.

147. Each corporal will then make a list of the members of his relief, including himself. This list will contain the number of the relief, the name, the company, and regiment of every member thereof, and the post to which each is assigned. The list will be made in duplicate, one copy to be given to the sergeant of the guard as soon as completed, the other to be retained by the corporal.

148. As soon as directed by the officer of the guard, the corporal of the first relief posts his relief.

149. The corporal forms his relief, and then commands:
CALL OFF.

Commencing on the right, the men call off alternately, *rear* and *front rank*, "*one*," "*two*," "*three*," "*four*," and so on; if in single rank, they call off from right to left. The corporal then commands:

1. *Right*, 2. **FACE**, 3. *Forward*, 4. **MARCH**.

If formed in single rank, the corporal commands: 1. *Twos right*, 2. **MARCH**.

In wet weather the relief may be marched at *secure arms*.

The corporal marches on the left, and near the rear file, in order to observe the march. The corporal of the old guard marches on the right of the leading file, and takes command

when the last one of the old sentinels is relieved, changing places with the corporal of the new guard.

150. When the relief arrives at 6 paces from a sentinel (see par. 223), the corporal halts it and commands, according to the number of the post: *No.* (—).

Both sentinels execute port arms or saber; the new sentinel approaches the old, halting about 1 pace from him. (See par. 215.)

151. The corporals advance and place themselves, facing each other, a little in advance of the new sentinel, the old corporal on his right, the new corporal on his left, both at a right shoulder, and observe that the old sentinel transmits correctly his instructions.

The following diagram will illustrate the positions taken:



R is the relief; A, the new corporal; B, the old; C, the new sentinel; D, the old.

152. The instructions relative to the post having been communicated, the new corporal commands, *Post*; both sentinels then resume the right shoulder, face toward the new corporal and step back so as to allow the relief to pass in front of them. The new corporal then commands, 1. *Forward*, 2. *MARCH*; the old sentinel takes his place in rear of the relief as it passes him, his place in the same position as those of the relief. The new sentinel stands fast at a right shoulder until the relief has passed 6 paces beyond him, when he walks his post. The corporals take their places as the relief passes them.

153. The sentinels at the guardhouse are the first relieved; they are left at the guardhouse. All others will march with the relief.

154. Mounted sentinels are posted and relieved in accordance with the same principles. (See par. 1072, Cav. D. R.)

155. On the return of the old relief, the corporal of the new guard falls out when the relief halts; the corporal of the old guard forms his relief on the left of the old guard, salutes, and reports to the commander of his guard: "*Sir, the relief is pres-*

ent;" or, "*Sir, (so and so) is absent,*" and takes his place in the guard.

156. To post a relief after the sentinels of the old guard have been relieved, its corporal forms it by the commands:

1. (*Such*) *relief*, 2. **FALL IN**; and if arms are stacked, 3. *Take*, 4. **ARMS**.

The relief is formed in double or single rank (according as the guard is formed) facing to the front, with arms at an *order* (see par. 109); the men place themselves according to the numbers of their respective posts, viz: two, four, six, and so on, in the *front* rank, one, three, five, and so on, in the *rear* rank, or in the order of their respective posts from right to left, according as the relief is in double or single rank. The corporal, standing about two paces in front of the center of his relief, then commands: **CALL OFF**.

The men call off as prescribed. (Par. 149.) The corporal then commands:

1. *Port*, 2. **ARMS**, 3. **OPEN CHAMBER**, 4. **CLOSE CHAMBER**, 5. *Order*, 6. **ARMS**; faces the commander of the guard, executes the rifle salute, reports, "*Sir, the relief is present;*" or, "*Sir, (so and so) is absent,*" and then takes his place on the right at order arms.

157. Having inspected the relief (see par. 86), the commander of the guard directs the corporal, *Post your relief*. The corporal salutes and posts his relief as prescribed (pars. 149 to 153); the corporal of the relief on post does not go with the new relief, except when necessary to show the way.

158. If so directed by the commander of the guard, the corporal, before posting his relief, will command: 1. *With ball cartridges*, 2. **LOAD**, 3. *Order*, 4. **ARMS**.

159. To dismiss the old relief, it is halted and faced to the front at the guardhouse by the corporal of the new relief, who then falls out; the corporal of the old relief then steps in front of the relief, and commands: 1. *Port*, 2. **ARMS**, 3. **OPEN CHAMBER**, 4. **CLOSE CHAMBER**, 5. **DISMISSED**, or, 5. *Order*, 6. **ARMS**, 7. *Stack*, 8. **ARMS**, 9. **DISMISSED**.

160. Should the pieces have been loaded before the relief was posted, the corporal will, before dismissing his relief, see that no cartridges are left in the chambers or magazines. The same rule applies to sentinels over prisoners.

161. Each corporal will thoroughly acquaint himself with all the special orders of every sentinel on his relief, and see that

each sentinel correctly transmits such orders *in detail* to his successor.

162. He will see that each sentinel, on being posted, clearly understands the limits and extent of his post.

163. There should be at least one noncommissioned officer constantly on the alert at the guardhouse, usually the corporal whose relief is on post. This noncommissioned officer takes post near the entrance of the guardhouse, and does not fall in with the guard when it is formed. He will have his rifle constantly with him.

164. Whenever it becomes necessary for the corporal to leave his post near the entrance of the guardhouse, he will notify the sergeant of the guard, who will at once take his place, or designate another noncommissioned officer to do so.

165. He will see that no person enters the guardhouse, or guard tent, or crosses the posts of the sentinels there posted, without proper authority.

166. Should any sentinel call for the corporal of the guard, the corporal will, in every case, at once and quickly proceed to such sentinel. He will notify the sergeant of the guard before leaving the guardhouse.

167. He will at once report to the commander of the guard any violation of regulations or any unusual occurrence which is reported to him by a sentinel, or which comes to his notice in any other way.

168. Should a sentinel call "*The Guard,*" the corporal will promptly notify the commander of the guard.

169. Should a sentinel call "*Relief,*" the corporal will at once proceed to the post of such sentinel, taking with him the man next for duty on that post. If the sentinel is relieved for a short time only, the corporal will again post him as soon as the necessity for his relief ceases.

170. When the countersign is used, the corporal at the posting of the relief during whose tour challenging is to begin gives the countersign to the members of the relief, excepting those posted at the guardhouse.

171. He will, at the proper time, notify No. 1 of the hour, if sentinels are required to call the hours or half hours of the night.

172. He will wake the corporal whose relief is next on post in time for the latter to verify the prisoners, form his relief, and post it at the proper hour.

173. Should the guard be turned out, each corporal will call his own relief, and cause its members to fall in promptly.

174. Tents or bunks in the same vicinity will be designated for the reliefs so that all the members of each relief may, if necessary, be found and turned out by the corporal in the least time and with the least confusion.

175. When challenged by a sentinel while posting his relief, the corporal commands: 1. *Relief*, 2. *HALT*; to the sentinel's challenge, he answers "*Relief*," and at the order of the sentinel, he advances alone to give the countersign or to be recognized. When the sentinel says "*Advance relief*," the corporal commands: 1. *Forward*, 2. *MARCH*.

If to be relieved, the sentinel is then relieved as prescribed.

176. Between retreat and reveille, the corporal of the guard will challenge all suspicious looking persons or parties he may observe, first halting his patrol or relief, if either be with him. He will advance them in the same manner that sentinels on post advance like parties (pars. 232 to 238), but if the route of a patrol is on a continuous chain of sentinels, he should not challenge persons coming near him unless he has reason to believe that they have eluded the vigilance of sentinels.

177. Between retreat and reveille, whenever so ordered by an officer entitled to inspect the guard, the corporal will call: "*Turn out the guard*," announcing the title of the officer, and then, if not otherwise ordered, he will salute and return to his post.

178. Between retreat and reveille, on the approach of an armed party other than a returning relief or detachment of the guard, he will call: "*Turn out the guard. Armed party*," and remain where he can observe the movements of the party while the guard is forming, and then return to his post.

179. As a general rule he will advance parties approaching the guard at night in the same manner that sentinels on post advance like parties. Thus, the sentinel at the guardhouse challenges and repeats the answer to the corporal, as prescribed hereafter (par. 249); the corporal, advancing at port arms, says: "*Advance (so and so) with the countersign*," or, "*to be recognized*," if there be no countersign used; the countersign being correctly given, or the party being duly recognized, the corporal says: "*Advance (so and so)*," repeating the answer to the challenge of the sentinel.

180. When officers of different rank approach the guardhouse from different directions at the same time, the senior will be advanced first, and will not be made to wait for his junior.

181. Out of ranks and under arms, the corporal salutes with the rifle salute. He will salute all officers, whether by day or night.

182. The corporal will examine parties halted and detained by sentinels, and if he have reason to believe the parties have no authority to cross sentinels' posts, will conduct them to the commander of the guard.

183. The corporal of the guard will arrest all suspicious looking characters prowling about the post or camp, all persons of a disorderly characters disturbing the peace, and all persons taken in the act of committing crime against the Government on a military reservation or post. All persons arrested by corporals of the guard, or by sentinels, will at once be conducted to the commander of the guard by the corporal.

MUSICIANS OF THE GUARD.

184. Musicians of the guard are subject to the orders of none but the commanding officer, the officer of the day, officers and noncommissioned officers of the guard.

185. Unless otherwise directed by the commanding officer, they will remain at the guardhouse during their tour, and will fall in with the guard when it is formed. They form on a line with the front rank of the guard, their left three paces from the right guide.

186. Musicians of the guard sleep at the guardhouse unless otherwise directed by the commanding officer.

187. They will sound all calls prescribed by the commanding officer, and such other calls as may be ordered by proper authority, at such times and places as may be directed.

188. Should the guard be turned out for national or regimental colors or standards, uncased, the field music of the guard will, when the guard presents arms, sound "*To the color*," or "*To the standard*;" or, if for any person entitled thereto, the prescribed march, flourishes, or ruffles, as follows:

The President—the President's March.

The General—the General's March.

The Lieutenant General—trumpets sounding three flourishes or drums beating three ruffles.

A major general—two flourishes or two ruffles.

A brigadier general—one flourish or one ruffle.

To the sovereign or chief magistrate of a foreign state or member of a royal family—the same honors as are paid to the President.

To the Vice-President, the members of the Cabinet, the Chief Justice, the President of the Senate, the Speaker of the House of Representatives, American or foreign ambassadors, and governors within their respective States or Territories—the same honors as to the General.

To the Assistant Secretary of War and to American or foreign envoys or ministers—the same honors as to the Lieutenant-General.

To officers of the navy—the honors due to their assimilated or relative rank; to officers of marines and volunteers, and militia when in the service of the United States, the honors due to like grades in the regular service; to officers of a foreign service, the honors due to their rank. (See pars. 381, 382, and 383, A. R.)

ORDERLY FOR THE COMMANDING OFFICER.

189. When so directed, the adjutant will select an orderly for the commanding officer from the members of the new guard, an extra man being detailed for guard for this purpose; the selection is usually made during the inspection at guard mounting.

190. That soldier will be chosen who is most correct in the performance of duty and in military bearing, neatest in person and clothing, and whose arms and accouterments are in the best condition. Clothing, arms, and equipments must conform to the regulations prescribing the uniform. If there be doubt as to the relative merits of two or more soldiers, the adjutant may cause them to form in line a few paces in front of the guard, or may proceed to the guardhouse and cause them to form in line a few paces from the guard, after it has been brought to an order. They fall in facing to the front at order arms. The adjutant will cause them to execute the manual of arms, both with and without the numbers, to march, etc., the most proficient being selected as orderly. If doubt still exists, he will subject them to a more minute inspection, or may cause them to draw lots.

The adjutant will notify the commander of the guard of his selection.

191. When directed by the commander of the guard to fall out and report, the orderly will give his name, company, and regiment to the sergeant of the guard, and, leaving his rifle in the armrack in his company quarters, will proceed at once to the commanding officer, reporting: "*Sir, Private ———, Company ———, reports as orderly.*"

192. If the orderly selected be a cavalryman, he will report equipped with saber belt and saber, unless otherwise directed by the commanding officer, first leaving his rifle in the armrack of his troop quarters.

193. In the field, or on the march, the equipment of the orderly will be as directed by the commanding officer.

194. The orderly, while on duty as such, is subject to the orders of the commanding officer only.

195. When ordered to carry a message, he will be careful to deliver it exactly as it was given to him.

196. The orderly may be permitted to sleep in his company quarters, or in such other place as the commanding officer may direct.

197. His tour of duty ends when he is relieved by the orderly selected from the guard relieving his own.

198. The orderly is a member of the guard, and his name, company, and regiment are entered on the guard report and lists of the guard.

199. If the necessities of the service require the habitual detail of other orderlies, they are selected and detailed as prescribed for the orderly for the commanding officer. They are subject to the orders of none but the commanding officer and the officer for whom detailed.

PRIVATES OF THE GUARD.

200. Without permission from the commander of the guard, members of the guard, except orderlies, will not leave the immediate vicinity of the guardhouse. Permission to leave will not be given except in cases of necessity.

201. Members of the guard, except orderlies, will not remove their accouterments or clothing without permission from the commander of the guard. (See par. 94.)

202. During his tour of guard duty a soldier is subject to the orders of the commanding officer, the officer of the day, the officers and noncommissioned officers of the guard only.

203. When not engaged in the performance of a specific duty, the proper execution of which would prevent it, a member of the guard will salute all officers who pass him. This rule applies at all hours of the day or night.

204. Whenever the guard or a relief is dismissed, each member not at once required for duty will place his rifle in the arm-racks, if they be provided, and will not remove it therefrom unless he requires it in the performance of some duty.

205. Privates are assigned to reliefs by the commander of the guard, and to posts, usually, by the corporal of their relief. They will not change from one relief or post to another during the same tour of guard duty unless by proper authority.

206. Should the guard be formed, soldiers will fall in ranks under arms. At a roll call, each man, as his name or number and relief are called, answers "*Here,*" and comes to *order arms*.

207. No soldier shall hire another to do his duty for him. (Thirty-sixth article of war.)

208. Any soldier who is found drunk on his guard, party, or other duty, shall suffer such punishment as a court-martial may direct. (Thirty-eighth article of war.)

ORDERS FOR SENTINELS ON POST.

209. Orders for sentinels on post are divided into two classes, *general orders* and *special orders*.

210. Sentinels will be required to memorize the following:

My general orders are:

(a) *To take charge of this post and all government property in view;*

(b) *To walk my post in a military manner, keeping constantly on the alert, observing everything that takes place within sight or hearing;*

(c) *To report every breach of orders or regulations that I am instructed to enforce;*

(d) *To repeat all calls from posts more distant from the guard-house than my own;*

(e) *To quit my post only when properly relieved;*

(f) *To receive, transmit, and obey all orders from and allow myself to be relieved by the commanding officer, officer of the day, an officer or noncommissioned officer of the guard only;*

(g) *To hold conversation with no one except in the proper discharge of my duty;*

(h) *In case of fire or disorder to give the alarm;*

(i) *To allow no one to commit nuisance in the vicinity of my post;*

(j) *In any case not covered by instructions, to call the corporal of the guard;*

(k) *To salute all officers and colors or standards not cased;*

(l) *At night to exercise the greatest vigilance. Between retreat (or — o'clock, naming the hour designated by the commanding officer) and broad daylight (or — o'clock, naming the hour designated by the commanding officer), challenge all persons seen on or near my post, and allow no person to pass without proper authority.*

211. In addition to the foregoing, sentinels posted at the guardhouse or guard tent will be required to memorize the following:

(m) *Between reveille and retreat, to turn out the guard for all persons entitled to the compliment, for all colors or standards not cased, and for all armed parties approaching my post, except troops at drills and reliefs or detachments of the guard;*

(n) *At night, after challenging any person or party, to advance no one, but call the corporal of the guard, repeating the answer to the challenge.*

212. A sentinel on post is not required to halt and change the position of his rifle on arriving at the end of his post, nor to execute *to the rear, march*, precisely as prescribed in the drill regulations, but faces about *while marching* in the way most convenient to him, and either to the right-about or left-about, and at any part of his post, as may be best suited to the proper performance of his duties. He carries his rifle on either shoulder, and in wet or severe weather, when not in the sentry box, may carry it at a secure.

213. Sentinels, when in sentry boxes, stand at ease. Sentry boxes will be used in wet weather only, or at other times when specially authorized by the commanding officer.

214. In very hot weather, sentinels may be allowed to stand at ease on their posts, provided they can in this position effectively discharge their duties. Sentinels will be allowed to take advantage of this privilege only on the express authority of the commander of the guard or the officer of the day.

215. When calling for any purpose, challenging, or holding communication with any person, a dismounted sentinel, armed

with the rifle or saber, will take the position of port arms or saber. At night a dismounted sentinel, armed with the pistol, takes the position of raise pistol in challenging or holding communication. A mounted sentinel in the daytime does not ordinarily draw his weapon in calling or in holding communication; but, if drawn, he holds it at advance rifle, raise pistol, or port saber, according as he is armed with the rifle, pistol, or saber. At night, in challenging and in holding communication, he has his weapon at advance rifle, raise pistol, or port saber, according as he is armed with the rifle, pistol, or saber.

216. A mounted sentinel will not dismount, without authority, while on duty as a sentinel.

217. A sentinel will quit his piece on an explicit order from any person from whom he lawfully receives orders while on post; under no circumstances will he yield it to any other person. Unless necessity therefor exists, no person will require a sentinel to quit his piece, even to allow it to be inspected.

218. A sentinel will arrest suspicious persons prowling about the post or camp at any time, all parties to a disorder occurring on or near his post, or any, except authorized persons, who attempt to enter the camp at night, and will turn over all persons arrested to the corporal of the guard.

219. He will at once report to the corporal of the guard every unusual or suspicious occurrence noticed.

220. If relief becomes necessary, by reason of sickness or other cause, the sentinel will call, "*Corporal of the guard, No. (—); Relief,*" giving the number of his post.

221. To call the corporal of the guard for any other purpose than for relief, the sentinel will call, "*Corporal of the guard, No. (—),*" adding the number of his post. In no case will the sentinel call, "*Never mind the corporal;*" nor will the corporal heed such call if given.

222. Whenever relieved, a sentinel will repeat, *in detail*, to his successor, all special orders relating to his post.

223. If a sentinel is to be relieved, he will halt and face toward the relief with arms at a right shoulder, when the relief is 30 paces from him. He will come to port arms with the new sentinel. The old sentinel, under the supervision of both corporals, gives in a low tone his instructions to the one taking post. (See pars. 150 and 215.)

ORDERS FOR SENTINELS EXCEPT THOSE AT THE POST OF THE GUARD.

224. In case of fire, the sentinel will call, "*Fire, No. (—)*," adding the number of his post; if possible, he will extinguish the fire by his own efforts. In case of disorder he will call, "*The guard, No. (—)*," adding the number of his post. If the danger be great, he will in either case discharge his piece before calling.

NIGHT ORDERS.

225. A sentinel will not permit any person to approach so close as to prevent the proper use of his own weapon before recognizing the person or receiving the countersign.

226. Between retreat (or the hour designated by the commanding officer) and broad daylight (or the hour designated by the commanding officer), if a sentinel sees any person or party on or near his post, he will advance rapidly along his post toward such person or party, and when within about 30 paces will challenge sharply, "*Halt. Who is there?*" He will place himself in the best position to receive or, if necessary, arrest the person or party.

227. In case a mounted party be challenged, the sentinel will call, "*Halt. Dismount. Who is there?*"

228. A sentinel will not divulge the countersign to anyone except the sentinel who relieves him, or to a person from whom he properly receives orders, on such person's verbal order given personally. Privates of the guard will not use the countersign except in the performance of their duties while posted as sentinels.

229. *Forty-fourth article of war.*—Any person belonging to the armies of the United States who makes known the watchword to any person not entitled to receive it, according to the rules and discipline of war, or presumes to give a parole or watchword different from that which he received, shall suffer death, or such other punishment as a court-martial may direct.

230. The sentinel will suffer one only of any party to approach him for the purpose of giving the countersign, or, if no countersign be used, of being duly recognized. When this has been done, the whole party is advanced, i. e., allowed to pass.

231. In all cases the sentinel must satisfy himself beyond a reasonable doubt that the parties are what they represent them-

selves to be, and have a right to pass. If he be not satisfied, he must cause them to stand, and call the corporal of the guard. So, likewise, if he have no authority to pass persons with the countersign, or when the party challenged has not the countersign, or gives an incorrect one.

232. When two or more persons approach in one party, the sentinel, on receiving an answer that indicates that some one in the party has the countersign, will say, "*Advance one with the countersign,*" and, if the countersign is given correctly, will then say, "*Advance (so and so),*" repeating the answer to his challenge. Thus if the answer be "*Relief (Friends with the countersign, Patrol, etc.),*" the sentinel will say, "*Advance one with the countersign;*" then, "*Advance relief (friends, patrol, etc.).*"

233. If a person having the countersign approach alone, he is advanced to give the countersign. Thus: If the answer be "*Friend with the countersign (or officer of the day, or etc.),*" the sentinel will say, "*Advance, friend (or officer of the day, or etc.), with the countersign;*" then, "*Advance, friend (or officer of the day, or etc.).*"

234. If two or more parties approach a sentinel's post from different directions at the same time, all such parties are challenged in turn. The senior is first advanced, in accordance with the foregoing rules.

235. If a party be already advanced, and in communication with a sentinel, the latter will challenge any other party that may approach; if the party challenged be senior to the one already on his post, the sentinel will advance such party at once. The senior may allow him to advance any or all of the other parties; otherwise, the sentinel will not advance any of them until the senior leaves him. He will then advance the senior only of the remaining parties, and so on.

236. The following order of rank will govern a sentinel in advancing different persons or parties approaching his post at night: Commanding officer, officer of the day, officer of the guard, officers, patrols, reliefs, noncommissioned officers of the guard in the order of rank, friends.

237. The sentinel will never allow himself to be surprised, nor permit two parties to advance upon him at the same time.

238. If no countersign be used, the rules for challenging are the same. The rules for advancing parties are modified only as follows: Instead of saying "*Advance (so and so) with the countersign,*" the sentinel will say "*Advance (so and so) to be*"

recognized." Upon recognition the sentinel will say, "*Advance (so and so).*"

239. When not in the presence of the enemy, sentinels may be required to call the hours and half hours between the time when challenging begins and reveille.

When this is required, they will call successively in the numerical order of their posts, beginning at the guardhouse (see par. 251), each one giving the number of his post, repeating the hour of the night, then adding: "*All's well.*" Thus: "*No. 2, half past eleven o'clock. All's well.*" This call should be made, and the number of the post and the hour announced in a clear and distinct manner, without unduly prolonging the words.

240. In case any sentinel fails to call off, the one next preceding him will repeat the call; if the call is not taken up within a reasonable time, he will call the corporal of the guard, and report the facts.

ORDERS FOR SENTINELS AT THE POST OF THE GUARD.

241. Between reveille and retreat, the sentinel at the post of the guard will turn out the guard on the approach of any of the persons or parties entitled to the compliment. (See pars. 265, 267 to 270.)

242. The following examples illustrate the manner in which a sentinel at the post of the guard turns out the guard: "*Turn out the guard, commanding officer;*" "*Turn out the guard, Governor of Territory;*" "*Turn out the guard, national colors;*" "*Turn out the guard, armed party,*" etc.

At the approach of the new guard at guard mounting, the sentinel will call, as in the last example: "*Turn out the guard, armed party.*"

243. Should the person named by the sentinel not desire the guard formed, he will salute, whereupon the sentinel calls, "*Never mind the guard.*"

244. After having called, "*Turn out the guard,*" the sentinel will not, in any case, call, "*Never mind the guard,*" on the approach of an armed party.

245. Though the guard be already formed, he will not fail to call, "*Turn out the guard,*" as required in his general orders, except as provided in paragraph 246.

246. If two or more persons entitled to the compliment approach at the same time, the sentinel will call for the senior

only; if the senior does not desire the guard formed, the sentinel then calls, "*Never mind the guard.*" The guard will not be turned out for an officer while a senior entitled to the compliment is at or coming to the post of the guard.

247. The sentinels at the post of the guard will warn the commander of the approach of any armed body and of the presence in the vicinity of all suspicious or disorderly persons. They will not permit enlisted men to pass without reporting, unless orders to the contrary have been given by the commanding officer.

248. In case of fire or disorder in sight or hearing, the sentinel at the guardhouse will call the corporal of the guard and report the facts to him.

NIGHT ORDERS.

249. After receiving an answer to his challenge, the sentinel calls, "*Corporal of the guard (so and so),*" repeating the answer to his challenge. He does not in such cases repeat the number of his post.

250. He remains in the position assumed in challenging until the corporal has recognized and advanced the person or party challenged, when he resumes walking his post; if the person or party be entitled thereto, he salutes and, as soon as the salute is acknowledged, resumes walking his post.

251. In calling the hours of the night, No. 1 will, at the direction of a noncommissioned officer of the guard, call, "*No. 1, (such) o'clock.*" After the call has passed around the chain of sentinels he will call "*All's well.*"

In the event of such a disposition of posts that the call of the sentinel whose post is last in numerical order can not be heard by No. 1, the call "*All's well*" may be returned along the line to the sentinel whose voice can be heard at the post of the guard.

COMPLIMENTS FROM SENTINELS.

252. Sentinels will salute as follows: A dismounted sentinel armed with the rifle or saber salutes by presenting arms; if otherwise armed, he salutes with the right hand.

A mounted sentinel, if armed with the saber and the saber be drawn, salutes by presenting saber; otherwise, he in all cases salutes with the right hand.

253. To salute, a dismounted sentinel halts and faces outward, his piece at a right shoulder or his saber at a carry, as the person or party entitled to salute arrives within about 30 paces.

If the officer approaches along the post, the salute will be given when the officer arrives at the distance of about 6 paces.

If he passes in front of the sentinel, but not along the post, he is saluted just before he passes the sentinel's front.

If he crosses the post, he is saluted just before he crosses.

The sentinel will remain at the present until his salute is returned, or until the person saluted has passed.

He resumes walking his post when the person saluted has passed about 6 paces beyond him.

If an officer passes in rear of the post, he is not saluted, but the sentinel stands facing outward until the officer has passed about 6 paces.

254. A sentinel in a sentry box, armed with the rifle, stands at attention at an order on the approach of a person or party entitled to salute, and salutes by presenting arms, in accordance with the foregoing rules.

If armed with the saber, he stands at the carry and salutes as before.

255. A mounted sentinel on a regular post halts, faces outward, and salutes in accordance with the foregoing rules; if doing patrol duty, he salutes, but does not halt unless spoken to.

256. Sentinels salute, in accordance with the foregoing rules, all persons and parties entitled to compliments from the guard (pars. 265, 267, 268, 270); officers of the Army, Navy, and Marine Corps; military and naval officers of foreign powers; officers of volunteers and militia, when in the service of the United States.

257. A sentinel salutes as above prescribed when an officer comes on his post; if the officer holds communication with the sentinel, the sentinel salutes again when the officer leaves him.

During the hours when challenging is prescribed, the first salute is given as soon as the officer has been duly recognized and advanced. A mounted sentinel armed with the rifle or pistol, or a dismounted sentinel armed with the pistol, does not salute after challenging. He stands at advance rifle or raise pistol until the officer passes.

258. In case of the approach of an armed party of the guard, the sentinel will halt when it is about 30 paces from him, facing toward the party, with his piece at the right shoulder. If not

himself relieved, he will, as the party passes, place himself so that it will pass in front of him; he resumes walking his post when the party has passed 6 paces beyond him.

259. Except as provided in paragraphs 256 and 258, sentinels do not halt or salute on the approach of any armed or unarmed body of troops, unless the same are commanded by a commissioned officer.

260. The rules for saluting applicable to sentinels over prisoners are prescribed in paragraph 360.

261. Saluting distance is the limit within which individuals and insignia of rank can be readily recognized; it is assumed to be about 30 paces.

262. An officer is entitled to the compliments prescribed whether in uniform or not.

263. If an officer or group of officers remain on or near a sentinel's post, the sentinel salutes but once; after that he walks his post.

264. A sentinel in communication with an officer will not interrupt the communication to salute a junior, unless directed by the senior to do so.

COMPLIMENTS FROM GUARDS.

265. Between reveille and retreat, the guard of a post or camp turns out and presents arms to the following: The President; sovereign or chief magistrate of a foreign country and members of a royal family; Vice-President; President of the Senate; American and foreign ambassadors; members of the Cabinet; Chief Justice; Speaker of the House of Representatives; committees of Congress officially visiting a military post; governors within their respective States or Territories; governors-general;^a Assistant Secretary of War officially visiting a military post; all general officers of the army; general officers of a foreign service visiting a post; naval, marine, volunteer, and militia officers in the service of the United States and holding the relative rank of general officer; American and foreign envoys or ministers; ministers resident accredited to the United States; *chargés d'affaires*; consuls-general accredited to the United States; commanding officer of the post or camp; officer of the day.

^a The term "governors general" shall be taken to mean administrative officers under whom officers with the title of governor are acting.

266. The relative rank between officers of the army and navy is as follows: General with Admiral, Lieutenant-General with Vice-Admiral, Major-General with Rear-Admiral, Brigadier-General with Commodore,* Colonel with Captain, Lieutenant-Colonel with Commander, Major with Lieutenant-Commander, Captain with Lieutenant, First Lieutenant with Lieutenant (junior grade), Second Lieutenant with Ensign. (A. R., 12.)

267. Guards will turn out and present arms when the national or regimental colors or standards, not cased, are carried past by a color guard or any armed party. This rule applies also when the party carrying the colors is at drill. If the drill is conducted in the vicinity of the guardhouse, the guard will be turned out when the colors first pass and not thereafter.

Colors and standards when cased will not be saluted, nor will the guard turn out for them.

268. All guards will turn out under arms when armed parties, except troops at drill and reliefs or detachments of the guard, approach their posts. To parties commanded by commissioned officers they will present arms, officers saluting.

269. The old guard will turn out and present arms on the approach of the new guard, and the new guard will present arms as the old guard marches past, commanders of both guards saluting in both cases, whatever be the grade of either commander.

270. In case the remains of a deceased officer or soldier are carried past, the guard will turn out and present arms.

271. The commander of an armed party should have his command at attention before returning the salute of a guard or sentinel and until he has passed six paces beyond the guard or sentinel.

272. Guards will, subject to the provisions of paragraph 81, turn out and present arms to persons entitled to the compliment as often as they pass. The personal guard of a general officer will turn out to him and to his superiors in rank only.

273. Guards do not turn out as a matter of compliment after sunset, nor will any compliments be paid by the guard as a

* The grade of commodore ceased to exist as a grade of rank on the active list in the Navy of the United States on March 3, 1899. By section 7 of the act of March 3, 1899, the nine junior rear-admirals are authorized to receive the pay and allowances of a brigadier-general of the army.

formed body between retreat and reveille, except as provided in paragraph 289.

274. From reveille until retreat is the interval between the firing of the morning and the evening gun; or if no gun be fired it is the interval between the sounding of the first note of the reveille, or the first march, if marches be played, and the last note of the retreat.

275. A guard may be turned out between retreat and reveille by direction of any person entitled to inspect it.

276. All guards and sentinels will salute the civil officers of the United States or foreign powers enumerated in paragraph 265; and will pay to all officers in the military or naval service of foreign powers, officers of the Navy or Marine Corps, and officers of militia or volunteers when in the service of the United States, the compliments directed to be paid to officers of the army of corresponding rank. (See par. 266.)

SPECIAL ORDERS.

277. Special orders define the duties to be performed by a sentinel on a particular post, and are prescribed by the commanding officer.

278. The number, limits, and extent of his post will invariably constitute part of the special orders of every sentinel on post. The limits of his post should be so defined as to include every place to which he is required to go in the performance of his duties.

279. The sentinel at the commanding officer's tent will warn him, day or night, of any unusual movements in or about the camp.

280. Special orders for sentinels over the colors and over prisoners will be found in paragraphs 289 and 359 to 363, inclusive.

COLOR LINE AND SENTINELS.

281. A sufficient number of sentinels is placed on the color line to guard the colors and stacks.

282. In camps of instruction, the proper number of sentinels for the color line will be selected from the guard by the adjutant at guard mounting, the required number of extra men

being detailed for guard for this purpose. They are designated *color sentinels*, and are selected in the manner prescribed for the selection of the orderly for the commanding officer. (See par. 190.)

283. Color sentinels so selected are on post only so long as the stacks are formed. If necessary, their places are taken at night by the other sentinels posted on the color front or on the flanks.

284. When stacks are broken, the color sentinels may be permitted to return to their respective companies. They are required to report in person to the commander of the guard at reveille and retreat. They will fall in with the guard, under arms, at guard mounting.

285. Color sentinels are not placed on the regular reliefs, nor are their posts numbered. In calling for the corporal of the guard, they call, "*Corporal of the guard. Color line.*"

286. The time of walking post on the color line is equally divided among the color sentinels by the commander of the guard.

287. A color sentinel on post is subject to and will observe all the general orders prescribed for sentinels on other posts.

288. Officers or enlisted men passing the uncased colors will render the prescribed salute; with no arms in hand, the salute will be made by uncovering. If the colors are on the stacks, the salute will be made on crossing the color line, or on passing the colors. (A. R., 383.)

SPECIAL ORDERS FOR COLOR SENTINELS.

289. A sentinel placed over the colors will not permit them to be moved, except in the presence of an armed escort. Unless otherwise ordered by the commanding officer he will allow no one to touch them but the color bearer, or a noncommissioned officer of the guard.

He will not permit any soldier to take arms from the stacks, or to touch them, except by order of an officer, or a noncommissioned officer of the guard.

If any person passing the colors or crossing the color line fails to salute the colors, the sentinel will caution him to do so, and if the caution be not heeded, he will call the corporal of the guard and report the facts.

SUPERNUMERARIES.

290. Supernumeraries will not be allowed to leave the camp or garrison; they will hold themselves constantly in readiness for detail as members of the guard. They will not, however, be excused from ordinary camp or garrison duties, but will not be detailed for anything that may interfere with their duties as supernumeraries. (See pars. 32 to 34.)

PRISONERS.

314. A prisoner under charge of a sentinel will not salute an officer.

SPECIAL ORDERS FOR SENTINELS IN CHARGE OF PRISONERS.

359. The sentinel at the post of the guard has charge of the prisoners. He will allow none to escape or to cross his post leaving the guardhouse, except under proper guard and passed by a noncommissioned officer of the guard.

He will allow no one to communicate in any way with prisoners without permission from proper authority.

He will at once report to the corporal of the guard any suspicious noise made by prisoners.

He must be prepared to tell, whenever asked, how many prisoners are in the guardhouse, and how many are at work, or elsewhere.

Whenever prisoners pass his post, returning from work, he will halt them and call the corporal of the guard, notifying him of the number of prisoners so returning. Thus: "*Corporal of the guard, (so many) prisoners.*"

He will not allow any prisoners to pass into the guardhouse until the corporal of the guard has responded to the call and ordered him to do so.

360. A sentinel in charge of prisoners at work will not suffer them to escape nor allow them to converse with each other, nor with any person without permission from proper authority. He will not himself speak to them, except in the execution of his duty. He will see that they do not straggle and are orderly in deportment, and that they keep constantly at work.

He will keep his prisoners constantly in front of him, and never allow them to walk at his side or in his rear. He will not at any time lose sight of them. When an officer approaches, or when he approaches an officer within six paces, he will salute with the rifle salute, taking care to keep his prisoners constantly in front of him.

It is proper, however, in the discretion of the commanding officer, to direct that sentinels in charge of prisoners render no compliment, when such orders are necessary in order that the sentinel may not have his attention diverted from the prisoners under his charge, and that he may be held to strict accountability for their safekeeping in situations favorable for escape.

361. If a prisoner attempts to escape, the sentinel will call "*Halt.*" If he fails to halt when the sentinel has once repeated his call, and if there be no other possible means of preventing his escape, the sentinel will fire upon him. * * *

362. On approaching the post of the sentinel at the guard-house, a sentinel in charge of prisoners will halt them and call, "*No. 1, (so many) prisoners.*" He will not allow them to cross the post of the sentinel until so directed by the corporal of the guard.

363. Sentinels placed over prisoners for work will receive specific and explicit instructions covering the required work; they will be held strictly responsible that the prisoners under their charge properly and satisfactorily perform the designated work.

GUARD PATROLS.

364. A guard patrol is a small detachment of two or more men detailed to observe and procure information of the enemy, or for the performance of some special service connected with guard duty. Patrols are usually detailed from the guard and receive instructions from its commander.

365. If the patrol be required to go beyond the chain of sentinels, the officer or noncommissioned officer in command will be furnished with the countersign, and the outposts and sentinels warned.

366. If challenged by a sentinel, the patrol is halted by its commander, and the noncommissioned officer accompanying it advances alone and gives the countersign.

COUNTERSIGNS AND PAROLES.

367. A *countersign* is a word given daily from the principal headquarters of a command to aid guards and sentinels in identifying persons who may be authorized to pass at night.

368. It is given to such persons as are entitled to pass and repass sentinels' posts during the night, and to officers, non-commissioned officers, and sentinels of the guard.

369. The *parole* is a word used as a check on the countersign in order to obtain more accurate identification of persons. It is imparted only to those who are entitled to inspect guards and to commanders of guards. * * *

370. * * * Persons whose sole means of identification is the countersign, or concerning whose authority to pass there is a reasonable doubt, should not be allowed to pass without the authority of the corporal of the guard after proper investigation; the corporal will take to his next superior any case that he himself is not competent to decide.

371. The *countersign* is usually the name of a battle; the *parole* that of a general or other distinguished person.

375. In addition to the countersign, use may be made of preconcerted signals, such as striking the rifle with the hand or striking the hands together a certain number of times, as agreed upon. Such signals may be used by the guards throughout the same general command or by those guards only that occupy exposed points.

They are made before the countersign is given, and must not be communicated to any person not authorized to know the countersign. Their use is intended to prevent the surprise of a sentinel.

376. In the daytime, signals, such as raising a cap or a handkerchief in a prearranged manner, may be used by sentinels to communicate with the guard or with each other.

MISCELLANEOUS.

377. All persons, of whatever rank in the service, are required to observe respect toward sentinels.

380. Answers to a sentinel's challenge intended to confuse or mislead him are prohibited, but the use of such an answer as

"Friends with the countersign" is not to be understood as misleading, but is the usual answer made by officers, patrols, etc., when the purpose of their visit makes it desirable that their official capacity should not be announced.

FLAGS.

430. At every military post or station the flag will be hoisted at the sounding of the first note of the reveille, or of the first note of the march, if a march be played before the reveille. The flag will be lowered at the sounding of the last note of the retreat, and while the flag is being lowered the band will play *The Star Spangled Banner*, or, if there be no band present, the field music will sound "to the color." When "to the color" is sounded by the field music while the flag is being lowered the same respect will be observed as when *The Star Spangled Banner* is played by the band, and in either case officers and enlisted men out of ranks will face toward the flag, stand at attention, and render the prescribed salute at the last note of the music. (A. R., 441.)

The lowering of the flag is so regulated as to be completed at the last note.

437. The sentinel at the guardhouse, or the sentinel nearest the flagstaff, will report at once to the corporal of the guard any danger to the flag, from loosened halyards, or from entanglement with either halyards or staff.

438. When practicable, a detail consisting of a noncommissioned officer and two privates of the guard will raise or lower the flag. This detail wears side arms, or if the special equipments do not include side arms, then belts only.

The noncommissioned officer, carrying the flag, forms the detail in line, takes his post in the center and marches it to and from the staff. The flag is then securely attached to the halyards, and is rapidly hoisted. (Par. 430.) The halyards are then securely fastened to the cleat on the staff.

The flag should always be hoisted or lowered from the leeward side of the staff, and the halyards should be held by two persons.

439. When the flag is to be lowered, the halyards are loosened from the staff and made perfectly free. At retreat the flag is lowered at the sounding of the last note of the retreat. It is then neatly folded, and the halyards are made fast. The detail

is then reformed and marched to the guardhouse, where the flag is turned over to the commander of the guard.

REVEILLE AND RETREAT GUN.

440. The morning and evening gun will be fired by a detachment of the guard, consisting, when practicable, of a corporal and two privates. The morning gun is fired at the first note of the reveille, or, if marches be played before the reveille, it is fired at the commencement of the first march. The retreat gun is fired at the last note of the retreat.

The corporal marches the detachment to and from the piece, and the piece is fired, sponged out, and secured under his direction.

MARCHES.

The principal work of troops in the field consists of marching. Battles take place only at indefinite intervals, but marches are of daily occurrence. It is only by good marching that troops can arrive at a given point at a given time and in good condition for battle.

The rate of march depends greatly upon the condition of the roads and the weather, but the average rate for infantry is about $2\frac{1}{2}$ miles per hour. This allows for a rest of ten minutes each hour. The total distance marched in a day depends not only on the rate of march, but upon the size of the command, large commands often covering only about 10 miles a day, while small commands easily cover double that distance.

In order to make the march with the greatest comfort and the least danger, it is necessary that each unit be kept well in hand. Each man is permitted and encouraged to make himself as comfortable as possible at all times, excepting only that he must not interfere with the comfort of others or with the march of the column.

Infantry generally marches in column of squads, but on narrow roads or trails column of twos or files is used. The route step is habitually used when silence is not required. In large commands, in order that the column be kept in hand, it is very necessary that each man keep his place in ranks and follow his file leader *at the prescribed distance*. This is one of the best tests for determining the discipline and efficiency of troops. The equipment should be carefully adjusted before starting out, and any part that is not comfortable should be rearranged

at the first opportunity. The rifle is carried at will, except that the muzzle must be pointed up so as not to interfere with the other men.

Under no circumstances will any man leave the ranks without permission from his company or higher commander. If the absence is to be for more than a short while, he must be given a pass showing his name, rank, and organization, and the reason he is permitted to be absent. If sick, it is better to wait by the roadside at some comfortable place for the arrival of the surgeon or the ambulance. In any case, the soldier keeps his rifle and equipment with him, if possible. Soldiers absent from their organization without a pass will be arrested and returned to their command for punishment.

Marches in hot weather are particularly trying. Green leaves or a damp cloth carried in the hat lessens the chance of sun-stroke. The hat should have ventilators, and when not exposed to the direct rays of the sun it should be removed from the head. It is well to keep the clothing about the neck and throat open, and to turn up the shirt sleeves so as to leave the wrists free.

The canteen should always be filled before starting out. Use the water very sparingly. Take only a few mouthfuls at a time and wash out the mouth and throat. Except, possibly, in very hot weather, one canteen of water should last for the entire day's march. Canteens will not be refilled on the march without authority from an officer, as the clearest water, whether from a well, a spring, or a running stream, may be very impure and the source of many camp diseases. A small pebble carried in the mouth keeps it moist and, therefore, reduces thirst. Smoking is very depressing during a march.

When a cooked lunch is carried, it should not be eaten until the proper time.

At every halt get all the rest possible and don't spend the time wandering around or standing about. Only green recruits do this. If the ground is dry, stretch out at full length, removing the blanket roll and belt, and get in as comfortable position as possible. The next best way is to sit down with a good back rest against a tree or a fence or some other object. Never sit down or lie down, however, on wet or damp ground. Sit on your blanket roll, or on anything else that is dry.

Do not leave the immediate vicinity of your place in ranks without permission. If canteens are to be refilled, a detail is

generally made for this purpose. Entering upon private property without permission, or stealing fruit, etc., from gardens and orchards is a serious military offense, as well as a violation of the civil laws.

PATROLS.

A patrol is a small number of men sent out under a leader, generally for the purpose of getting information of the country and of locating the large bodies of the enemy, but sometimes for the purpose of driving away similar patrols of the enemy, or for some other special purpose. An infantry patrol generally consists of from three to ten men.

Before starting out, the leader inspects the patrol. Each member should be well and strong, have good serviceable shoes, a full canteen, rifle and ammunition in good condition, equipment so arranged that nothing rattles and nothing bright is exposed which will glisten in the sunlight. The first-aid packet and at least the emergency ration should be carried by each man. In addition, the leader should have a map of the country, a watch, a pair of field glasses, a compass, a whistle, a message book, and pencils. Blanket rolls are generally left with the company in order that the patrol may travel as light as possible.

While mention is made of things every patrol should carry, it is no less important to call attention to things a patrol should not carry. *Nothing should be taken along which would give the enemy any valuable information should any member fall into his hands either dead or alive.* Among these prohibited articles are: (a) Copies of orders that would furnish the enemy valuable information; (b) detailed maps of a country with which it is probable the enemy is not familiar or which have the position of troops marked thereon; (c) letters or newspapers; (d) collar ornaments, etc., which indicate the organization to which the patrol belongs. Each member of the patrol is cautioned that, in case of capture, he is not to give any information, either correct or false, to the enemy.

The leader then gives the patrol certain instructions and information:

(a) He *tests* the men in the signals to be used. (Par 19, p. 49.) Other signals may be agreed upon, but they should be simple and thoroughly understood by each man.

(b) He gives them such information as he has of the country, the enemy, and of friendly troops, which might affect the movements of the patrol.

(c) He tells them just what the patrol is sent out to do, and what his plans are for doing it.

The last is very important and should be remembered by every man as it governs his actions in any emergency that may arise.

There is no fixed formation for a patrol to use. Generally one or more men march some distance in front as a point, others march as flanking groups, and sometimes one or more men are dropped back to watch the rear. The object of this is to observe more country than could be done if all the patrol marched together, and also to favor the escape of at least a part of the patrol in case of a surprise. *Any detached group that can not see sections of the country that the rest of the patrol can not see is, as a rule, in the wrong place. Likewise, if any near-by section of the country can not be observed by some part of the patrol, the formation is not a good one.*

Each member of the patrol must always keep in touch with the leader, or with some other member who is in touch with him.

A patrol must advance rapidly enough to perform its work in the time allotted. It must also advance quietly, making all possible use of cover to keep concealed, and each man must use his eyes and his ears. Short halts are made at places affording a good view, in order to observe the country. Landmarks to the rear should be noted in order that any member may find his way back, and places are designated from time to time where the patrol is to assemble in case it is attacked and forced to scatter. If no signs of the enemy are seen, the patrol moves rapidly, but cautiously, to another good observing place. If it finds it can not advance over the route intended, it must not give up, but should try some other route.

It must always be remembered that it makes no difference how valuable may be the information the patrol gets, it is worthless if not sent back in time to be of service. Herein is where most patrols fail. This applies particularly to the information obtained by patrols acting as a point or flankers of advance and rear flank guards. Whenever the patrol gets any information, the leader must think whether the commanding officer would change his plans or issue new orders if he had the information.

If he would, the information should be sent back at once. If the distance is great or the inhabitants are hostile, it is well to send two men with the message. These men should not travel side by side, but as a patrol of two men. If the information is very important, and the danger of capture is considerable, the message should be sent by two parties, each traveling by a different route.

A message from a patrol should always show (a) the place from which it is sent; (b) the time it is sent (date, hour, and minute); (c) to whom it is sent; (d) the message itself; (e) what the patrol intends doing after sending the message; (f) the name of the sender. Under (d) care must be taken to separate what has actually been seen by the patrol from information received from other sources. Care must also be taken not to exaggerate what is seen, but to report only the exact facts.

When the presence of the enemy is first clearly established, send a message.

Patrols may arrest civilians as well as soldiers. No stranger who has had an opportunity to see the patrol should be allowed to go in the direction of the enemy. Telegrams, maps, newspapers, and mail matter often contain valuable information and may be seized.

Patrols should observe everything for signs of the enemy. Even apparent trifles may be of great value. The finding of a collar ornament showing a man's regiment may enable the chief of staff to determine that the enemy has been reenforced.

Houses and villages should be avoided unless it is necessary to investigate them. Patrols should not travel on the main roads if they can observe them and at the same time make the necessary progress by moving some distance to the side of the roads.

Unless in case of attack or of great personal danger, no member of the patrol should fire on hostile troops without orders from the patrol leader. When sent out to gain information, patrols should avoid fighting unless it is absolutely necessary in order to carry out their orders.

When the enemy is encountered it is very necessary to locate his main force. Information is particularly desired of his strength, whether he has infantry, cavalry, and artillery, the route and direction of his march, or the location of his camp and line of outposts.

Dust clouds indicate moving bodies. Infantry raises a low, thick cloud; cavalry a high thin cloud; artillery and wagons a broken cloud. The kind of troops, direction of march, and approximate strength may thus sometimes be roughly estimated. If from some position a body of troops can be seen marching along in column, the exact time in minutes and seconds it requires for them to pass a certain point should be noted, together with the formation they are in, thus: Infantry, column of squads, three minutes and twelve seconds; cavalry, columns of twos at a trot, one minute and twenty seconds; wagons, 4-mule, five minutes. From this information the strength can be determined by the following rule:

Assuming that infantry in column of squads occupy half a yard per man, cavalry in column of fours 1 yard per man, and artillery and wagons in single column 20 yards per gun, caisson, or wagon, a given point would be passed in one minute by about—

175 infantry.

110 cavalry at a walk.

200 cavalry at a trot.

5 guns, caissons, or wagons.

For troops in column of twos, take one-half of the above estimate.

Patrols should always observe the country marched over, with a view to making a report on the same. The following information is always of value:

Roads.—Direction; kind, whether dirt, gravel, macadam, etc.; width, whether suitable for column of squads, etc.; border, whether fenced with stone, barbed wire, rails, etc.; steepness in crossing hills and valleys; where they pass through defiles and along commanding heights, etc.; crossroads.

Surrounding country.—Whether generally open and passable for infantry, cavalry, and artillery, or whether broken and impassable, due to fences, woods, crops, ravines, etc.

Railroads.—Single or double track, narrow or broad gauge, tunnels, bridges, cuts, direction, stations, etc.

Bridges.—Material, wood, stone, steel, etc.; length and breadth; number and kind of piers or supports.

Rivers.—Direction; width, depth; kind of bottom, such as mud, sand, rocky, etc.; banks, steep or gentle, open or wooded; rapidity of current; variations in depth at different times as

indicated by driftwood and high-water marks; islands; heights in vicinity commanding stream.

Woods.—Extent and shape; kind of trees; free from underbrush or not; clearings, roads, swamps, ravines, etc.

Telegraph lines.—Number of wires, along roads or railroads, stations, etc.

Villages.—Size, kind of houses, nature of streets, means of defense, etc.

Hills and ridges.—Whether slopes are gentle or steep; whether top is narrow or wide; whether ground is broken or smooth, wooded or clear; whether difficult or easy to cross, etc.; whether commanded by other hills.

Defiles.—Their direction, length, and width; whether surrounding heights are passable for infantry and artillery; kind of country at each opening of the defile, etc.

Ravines, ditches, etc.—Width and depth; banks, whether passable for infantry, cavalry, and wagons; whether suitable for trenches, or for movement of troops therein, etc.

In general, every soldier should be constantly on the lookout to obtain information that might be of some military value. Remember that information of the enemy and of the country is worthless unless made known to the proper officials in time to be of use.

Every soldier should be able to find his way in a strange country, should know how to use a compass, should know how to locate the North Star, should be able to travel across country, keeping a given direction, both by day and by night, and by observing landmarks he should be able to return to the starting point either over the same route or by a more circuitous one. This can easily be learned *by a little practice*.

It adds a great deal to the value of a soldier if he knows how to use a map to find his way. If he knows how to *make* a rough sketch of the country, showing the position of roads, streams, woods, railroads, bridges, houses, villages, fields, fences, and hills, etc., he has added to his value as a soldier very much indeed, because a rough sketch of a country will give more and better information at a glance than can be obtained by reading many pages of written description.

Patrolling is one of the most important duties a soldier can learn. Any enlisted man who understands thoroughly his duties as a member of a patrol will understand also most of his

duties when with advance or rear guards or when on outpost duty. Patrolling can not be learned merely by reading books nor by work in the armory. Thoroughness comes only by actually going out in the country and acting as a patrol.

In carrying out this idea the following scheme is recommended:

Let 4 or more men agree to take a half day off, say some Sunday. They assemble at a certain time, at a convenient point on some country road. One man, whom we will call Captain A, acts as the director; another man, whom we will call Sergeant B, acts as patrol leader; and the others (Privates C, D, E, etc.) act as members of Sergeant B's patrol.

Assume that the company (battalion, etc.) has just made camp in this vicinity, and that the inhabitants are friendly (or hostile).

Captain A indicates to the rest of the men where the camp is situated and points out where the various sentinels are posted. (This in itself affords an opportunity for much discussion and for teaching many valuable lessons.)

Captain A then calls up Sergeant B and tells him—

(a) Just what information Captain A has of the enemy, and also any information of the country or of friendly troops in the vicinity that might be of service to Sergeant B.

(b) How many men he shall take for the patrol (this is another problem for Captain A to solve. Any men present not used as part of the patrol go along with Captain A as observers).

(c) How far he shall go and what country he shall cover with the patrol.

(d) Just what information it is particularly desired he shall obtain.

(e) Where he shall send his messages and when he shall return.

Example 1:

"Sergeant B, it has just been reported to me that a company of hostile infantry was in camp last night at X, about 5 miles from here on this road. Take 5 men and proceed toward X and find out whether the enemy is still there, and if not, when he left and where he went. Send messages to me here, and return by 8 o'clock this evening."

Example 2:

"Sergeant B, I think I heard the firing of field guns over in that direction a short while ago. Take 6 men and proceed to that high hill you see over there about 4 miles away. Send a message to me here when you reach there. You may go farther if you then think it advisable, but return before daylight. I desire particularly to know if there are any hostile troops in this vicinity, especially artillery. I shall send Sergeant X with 3 men to observe the country from that hill you see over there farther to the south. He will remain there till dark. Send messages to me here. If the company is not here on your return you will find a note for you underneath this rail."

Example 3:

"Sergeant B, this friendly country boy has just reported that four hostile cavalrymen stopped about half an hour ago at his father's house, which he says is about 2 miles up this road. One of the men seemed to be very sick. You will select eight men from your section and endeavor to capture these men. If they have disappeared you will reconnoiter in that vicinity until dark. This boy will accompany you as a guide. I desire particularly to learn the position, strength, and composition of any hostile troops in this vicinity. Send reports to me here. Return before daylight."

Example 4:

"Sergeant B, here is a map of the country in this vicinity on a scale of 1 inch to the mile. Here is where we are camped [indicating position on map]. I have just learned that foraging parties of the enemy are collecting supplies over here at X [indicating point on map], which is 10 miles off in that direction [pointing across country toward X]. It is reported that this bridge over this stream [indicating same on the map], which is about 3 miles down this road [indicating road and direction on the ground], has been destroyed. You will take three men from your section and verify this report. You will also reconnoiter the stream for a distance of 1 mile both above and below the bridge for fords suitable for infantry. Messages will reach me here. Return by 8 o'clock to-night."

Sergeant B then inspects his men (for this exercise, however, the men may be in civilian clothes without arms or equipment) and gives them their instructions. The patrol is then

formed and moves out exactly as it would under actual war conditions.

Captain A may halt (and assemble if desirable) the patrol at intervals in order to discuss the formation used and the movement of any members of the patrol, their route, use of cover, etc., with the reasons therefor, and compare the same with suggested modifications of the formations, etc. After the discussion, the patrol is again set in motion. Captain A may accompany any part of the patrol. From time to time he presents certain situations to some member of the patrol, being very careful to assume only such situations as might naturally occur.

Thus, take Example 1:

Captain A is with Sergeant B, who, with Private C, is marching along the road as the point of the patrol. The other members of the patrol are distributed to suit the nature of the country over which the patrol is marching. The point has just reached a ridge beyond which the country is open and cultivated for about half a mile. Beyond this the road enters a woods. Captain A now says: "Sergeant B, from this point you see two soldiers in khaki on the road there at the beginning of that cornfield about 200 yards from the woods [points out same]. They are moving in this direction. About 200 yards to the right of these and somewhat farther to their rear you see two more men moving along that rail fence."

Sergeant B now does exactly as he would do in actual war. How does he signal to his patrol? Does he assemble his men? If so, how and where? Does he send a message back to camp; and if so, by whom, and is it written or verbal? (If written, Sergeant B actually writes it and delivers it to Private —, with the necessary instructions. If verbal, it is actually given to Private — with instructions.) Captain A must in this case make notes of what the message was. In either case, Private — ceases to be a member of the patrol and joins Captain A as an observer. He should, however, at some later time be required to repeat his message to Captain A, on the assumption that he had reached camp with the same. The message, whether oral or written, should be thoroughly analyzed and discussed. Was it proper to send a message at this time? Does Sergeant B intend to remain in observation; if so, how long? (Captain A can give such information from time to time concerning the hostile patrol as Sergeant B might reasonably be

supposed to learn in view of his dispositions. In order that Captain A may present natural assumptions, it is very essential that in his own mind he should, at the outset, assume a situation for the hostile forces and that he should consider himself as in command of all hostile troops. In this particular case he should assume himself to be in command of the hostile patrol, acting under certain specified orders similar to examples given, and he should conduct this patrol in his own mind in accordance with these orders, giving Sergeant B only such information as he might reasonably be expected to obtain in view of whatever action Sergeant B takes.) Will Sergeant B attempt to capture this patrol? If so, how? Will he avoid fighting and attempt to pass it unobserved; and if so, how and why?

In this manner the exercise is continued. Care must be taken not to have the patrol leader or members *state* what they would do, but they must actually *do* it. Explanations and discussions may take place later.

In a similar manner the director may inform Sergeant B (or any member of the patrol) that this hostile patrol is followed by a squad (on the assumption that it is the leading unit of an advance guard), and the exercise is then continued along these lines.

The following are examples of assumption that might be made and carried out:

- (a) That the patrol is unexpectedly fired upon.
- (b) That one or more of the patrol is wounded.
- (c) That a prisoner is captured (let an observer act as prisoner).
- (d) That a friendly inhabitant gives certain information.
- (e) That a dust cloud is seen in the distance over the trees.
- (f) That a column of troops can be seen marching along a distant road.
- (g) That an abandoned camp is discovered and certain signs noted.
- (h) That the patrol is attacked by a superior force and compelled to scatter.

There is practically no end to the number of reasonable assumptions that may be made.

Company officers may use this method of instructing non-commissioned officers in patrolling, advance and rear guard duty, outposts, and in squad leading, in writing messages, in selecting positions for trenches, and in constructing and con-

cealing same. This form of instruction is called "a tactical walk." It is very greatly used by all foreign armies. Exercises along the same general lines are conducted for field and staff officers and even general officers, and are called "tactical rides" and "strategical rides," depending upon their object.

After some proficiency has been attained as a result of these tactical walks, the greatest interest and enthusiasm can be awakened in this work by sending out two patrols the same day, one to operate against the other. Each should wear a distinctive uniform. The strength of each patrol, its starting point, route to be followed, and its orders should all be unknown to the other patrol. If blank ammunition is used, an officer should supervise its issue and carefully inspect to see that no man carries any ball cartridges. One umpire should accompany the commander of each party. Each umpire should be fully informed of the strength, orders, and route of both patrols. He must, however, carefully avoid giving suggestions or offering any information to the commander. Observers in these small maneuver problems are generally in the way and none should be permitted to be along.

These small maneuvers may be gradually developed by having one side establish an outpost or fight a delaying action, etc.

It should always be remembered that there is no hard and fast rule prescribing how a patrol of three, five, or any number of men should march. The same is equally true of advance guards, and applies also to the establishment of outposts. It is simply a question of common sense based on military knowledge. Don't try to remember any diagrams in a book. Think only of what you have been ordered to do and how best you can handle your men to accomplish your mission, and at the same time save the men from any unnecessary hardships. Never use two or more men to do what one can do just as well, and don't let your men get beyond your control.

ADVANCE AND REAR GUARDS.

When there is any possibility of encountering the enemy, every body of troops on the march throws out smaller bodies to provide for its security and to gain information. The part sent out to the front is called an advance guard, those to the flanks are called flank guards, and the part which follows the main body is called a rear guard. Each of these parts, in turn,

send out smaller parts for the same purpose and these, in turn, send out still smaller parts until those parts on the outer side are mere patrols. As we have seen, even patrols follow this same principle in the manner in which they march.

Each part must keep in touch with the unit from which it was sent out.

The advance guard is generally divided into two parts, called the *reserve* and the *vanguard*. The vanguard, in turn, is divided into two parts, called the *support* and the *advance party*.

The different parts of the advance guard send out patrols to the front and flanks. The leading patrol is called the *point*, and the other patrols are called *flankers*. The distance of the patrols from the rest of the advance guard may be as much as 600 yards or more in open country, while, on the other hand, it may be impossible to send any flanking patrols out at all in a country covered with dense forests or jungles or unnecessary to send out such patrols in a perfectly open country.

Often, owing to the difficulty of moving across country, patrols are unable to keep up with the unit that sent them out. In this case, other patrols are sent out from the unit to replace them and they then join the nearest unit on the line of march, taking advantage of the first halt to rejoin the unit from which they were sent out. Sometimes special patrols are sent out to some good observing point with instructions to remain there until the main body has passed. These patrols then rejoin their unit as described above.

The primary duty of the patrols (point and flankers) of the advance guard is to get information and to send this information back in time to be of use. Thus, if the point is fired upon, it should deploy and advance, if possible, fighting its way, knowing that other troops are on the march to support it. The flankers in this case should also continue to advance and try to locate the enemy's flanks, ascertain his strength, whether he has infantry, cavalry, and artillery, and whether there are any other troops in his rear. This information is valuable only if sent back in time to be of service.

If the enemy fire from one side of the line of march on one of the flanking patrols, it deploys and attacks, if possible, knowing it will be supported. The patrols on its flank move out to locate the enemy, as in the case of the point being fired upon. If the enemy retreats, the march must be promptly taken up so as not to delay the main body.

In the case of flank guards, the duties of the outer patrols are the same.

In the case of rear guards, however, the duties of the outer detachments (rear and flanking patrols) are somewhat different. They give warning of the approach of the enemy and delay his advance, but as their own troops are marching away from them, they must be careful not to be cut off.

When the main body halts to rest the advance and rear guards and flank guards act as an outpost. The patrols should not halt if by moving on some distance they can reach some point, as a hill or ridge, where they can better observe the country.

OUTPOSTS.

Troops not on march provide for their security by putting out outposts.

The duties of the outpost are (1) to get information of the approach of the enemy, (2) to prevent small bodies of the enemy from getting information of our troops or from disturbing their rest, and (3) in case of attack, to delay the enemy's advance until our main body can prepare to meet it.

At the proper distance from the camp of the main body a line is selected which is most easily defended in case of attack. This is called the *Line of Resistance*. The troops composing the outpost are generally divided into a *Reserve* and several *Supports*. The reserve is stationed at some point in rear of the Line of Resistance where it can be moved quickly to any part of the line as needed. The Line of Resistance is generally divided into sections and one support is assigned to defend each section. The supports are numbered from right to left, and generally take position with the main part of their strength on or near the Line of Resistance.

Each support sends out observation groups, called sentinel posts, double sentinel posts, cossack posts, sentry squads, or pickets, to keep a lookout for the enemy. A cossack post consists of four men, a sentry squad of eight men, and a picket is still larger, often a section or a platoon. The larger groups (pickets) are placed on important roads or at other places where large bodies of the enemy might be expected. The smaller groups are placed to cover less likely routes of advance. In some portions of the line of observation, where the country is very unfavorable for movements, no groups are used, but

patrols are sent out from time to time, either directly from the support or from adjoining observation groups. *It is seldom or never the case that the observation groups should all be of one kind*—all cossack posts or all pickets (the so-called cordon system). The observation groups of each support are numbered from right to left.

Each group has one or more sentinels always on the lookout, while the rest of the group is hidden nearby. Pickets generally furnish two or more sentinel posts and one or more patrols. These patrols are often sent out beyond the line of observation. Sometimes detached posts are placed beyond the line of observation, at points furnishing a good view.

It is the duty of these observation groups to give timely notice of the presence of any of the enemy or of any suspicious movements in their vicinity, to arrest any unauthorized person or party who approaches their post, and, in case of an attack, to fall back fighting, being careful not to fall back directly on the troops in the rear, but to one side, so as not to interfere with their field of fire.

Sentinels do not walk post, but remain concealed, motionless, and quiet. Their position must, however, afford a good view to their front and flanks. All glittering objects of uniform or equipment should be covered up. They keep quiet and use their ears as well as their eyes, especially at night. They carry their rifles at will. Smoking is not permitted. Officers are not saluted.

They report all suspicious movements or noises to the commander of their observation group. In case of great danger or when an attack is made they give the alarm by firing rapidly. Unnecessary firing should be carefully avoided, as one of the great duties of an outpost is to keep the main body from being disturbed.

Special orders will prescribe who shall be passed in and out of the lines, and how this is done. All others will be arrested. Anyone who fails to halt or otherwise obey a sentinel will be fired upon after a second warning, or sooner, if he attempts to attack or escape.

The Field Service Regulations prescribe that a sentinel should know the number and designation of his own post; the number and position of adjoining posts; the position of the examining post, the picket, and the support and the best way

thereto; the position of advance detachments; where the roads lead to; the names of villages, streams, and prominent features in sight; and the countersign, if one is issued.

The main thing for a sentinel to know, however, is the location of the sentinel posts next to his own and exactly *what he shall do on the approach of the enemy, either singly, in small parties, or in force, whether by day or night. If he knows this, he may be considered efficient.*

COMBAT.

The field of battle is the final test of the instruction, discipline, and efficiency of the fighting force of any army.

In the war in Manchuria, between Russia and Japan, the armies were of great size and the fighting sometimes extended along a front of from 30 to 50 miles, and sometimes lasted for many days. This will be the case in any great war of the future.

As far as any individual soldier is concerned, the greatest battle will consist only of a number of small fights mixed in with considerable hard marching, both by day and by night, short rations, heavy outpost duty, and other hardships.

The one requisite necessary to win the battle is intelligent team work. The army is handled just like a football team. A part is on the first line facing the enemy. Another part, like the half backs, is held back as supports. Another part, like the full backs, is held as a reserve. Each unit, like each player, has a certain duty to perform. When the signal is given, all work together—all play the game—team work. The players consist of all branches of the service.

The same rule holds true down to the smallest unit and even to the individual enlisted man. Each regiment is a team composed of three players—each a battalion. Each battalion is a team of four players—each a company. In the same manner each company is a team of two platoons; each platoon a team of two sections; each section a team of two or more squads; and, last, but not least, each squad is a team of eight players.

The one question that always presents itself on the battlefield every minute of the time to every person, whether he be a general or a private, is "*What play has my team captain ordered, and how best may I act so as to work in conjunction with the other players to bring about the desired result?*"—team play.

To the infantry private this means—

First. Prompt and loyal obedience to the squad leader. Every squad always has a team captain. If the squad leader is killed or disabled, another player previously designated takes his place. If no one was designated, then the private with the longest service takes command. When the squad leader gives the command for a certain play, don't stop to think if the play is a good one, but do your very best to carry out the play as ordered. A poor play in which every player enters with his whole heart (team work) will often win, while, on the other hand, the best play in which some of the players are skulkers and shirkers will probably fail.

Second. Never lose touch with your squad. Every individual, as well as every unit, should always be acting under the control of some higher commander. This is necessary if there is to be any unity of action. Therefore if you lose your squad or it becomes broken up, join the first squad you can find and obey your new squad leader as loyally and as cheerfully as you did your own.

Infantry approaches the battlefield in columns of squads. While yet several miles from the enemy's position the troops may come under artillery fire. On green men, entering upon their flight, the sound of the projectile whistling through the air, the noise, flash, and smoke on the burst of the shrapnel, and the hum of the various pieces thereafter all produce a very terrifying effect, but old soldiers soon learn to pay little attention to this, as the danger is not great.

As the troops advance the column breaks up into smaller columns which form on an irregular line with more or less interval between. As the advance continues each column breaks up into smaller columns until, finally, a line of skirmishers is found.

Firing is delayed as long as possible for three reasons, viz: (a) At the extreme ranges little damage can be done on the enemy, and ineffective firing always encourages him; (b) halting to fire delays the advance, and the great object to be accomplished is to close in on the enemy where you can meet him on better terms; (c) plenty of ammunition will be required at the decisive stage of the fight, and it is very difficult to send extra ammunition up to the firing line. *Therefore never fire until ordered to do so, and then never fire more than the number of rounds designated. Never fire after the command "cease firing" is given.*

Soon, however, it will be necessary to halt and open fire on the enemy in order to cause him some loss, to make his riflemen keep down in their trenches, and to make them fire wildly. It is probable that at this time and until you arrive much closer you will not see any of the enemy to fire at. You may not even see any trenches nor know just where the enemy is. Your higher officers, however, with their field glasses and the messages they receive, will know. Generally each company will be assigned a certain front to cover with its fire. *Therefore be careful to fix your sights at the designated range and fire only at the designated object.* This means team work in firing, which is one of the most important elements of success.

The firing line advances from position to position by means of rushes. At long range the entire line may rush forward at the same time, but as the range decreases one part of the line rushes forward while the remainder keeps up a hot fire on the enemy. The number taking part in each rush decreases as the fire of the enemy becomes warmer, until perhaps only one squad, or even less, rushes or crawls forward at a time, protected by the fire of the rest of the company. The distance covered by each rush also becomes less and less. After any rush no part of the line again advances until the rest of the line is up. *In making a rush, the leader of the unit gives the signal and leads the way. The rest follow. No attempt is made to keep a line, but each man rushes forward at a run, bending low, seeking only to reach the new halting position as quickly and with as little exposure as possible.* When halted, the skirmishers need not be in a perfect line, but every advantage should be taken of the ground for concealment and protection. It is necessary only that no man or group of men should interfere with the fire of other parts of the firing line.

The noise on the firing line will be great. Leaders will be disabled and new men will take their places. Reinforcements coming up will cause units to become mixed. To the green man everything may appear to be in confusion, but this is not so. This is war as it really is. *If you have lost your squad or your squad leader, join the leader nearest to you.* This is the way the game is played.

As long as the fight lasts every available rifleman must be kept in the firing line. The first and last consideration is to win the battle. *Therefore, under no circumstances will any sol-*

dier be permitted to go to the rear, either for ammunition or to assist the wounded.

If the attacking force can no longer advance, it is much safer to throw up hasty entrenchments and await the arrival of reinforcements or darkness than it is to retreat. Retreating troops are the ones that suffer the greatest. This lesson is taught by every great war, particularly the recent war between Russia and Japan. *Therefore, always remember that the safest thing to do is to stick to the firing line.*

Troops on the firing line, when not actually engaged in firing at the enemy, busy themselves throwing up shelter trenches. It only requires a few minutes to construct a trench that gives great protection. *Therefore, never get separated from your intrenching tool.*

Concealment is no less important than protection. Therefore, when conditions permit, as is generally the case when on the defensive, every effort should be made to hide intrenchments by the use of sod, grass, weeds, bushes, etc.

In making an attack, the infantry is always supported when possible by its own artillery, which continues to fire over its head until the infantry arrives very close to the enemy's trenches. This fire is helping you a great deal by keeping down the fire of the enemy's infantry and artillery. Therefore, don't think you are being fired into by your own artillery because you hear their shells and shrapnel singing through the air or bursting a short distance in your front, but rather be thankful you are receiving their help up to the very last minute.

In the last rush which carries the enemy's position there is always much mixing of units. The firing line does not continue rushing madly as individuals after the enemy, but halts and fires on him until he gets out of good range. The pursuit is taken up by formed troops held in reserve or by the firing line only after its units are again gotten together.

As the fighting often lasts all day, and great suffering is caused from thirst, *don't throw away your canteen when the fight commences.* It may also be impossible to get rations up to the line during the night. *Therefore it is advisable to hold onto at least one emergency ration.*

As the recent war in Manchuria has shown the possibility of hand-to-hand fighting, especially at night, each soldier should be schooled in the use of the bayonet.

CARE OF HEALTH.

History shows that in almost every war many more men die of disease than from wounds received in battle. Much of this disease is preventable and is due either to the ignorance or carelessness of the person who has the disease or of other persons about him. It is a terrible truth that one man who violates any of the great rules of health may be the means of killing many more of his comrades than are killed by the bullets of the enemy.

It is therefore most important that every soldier should learn how to take care of his health when in the field and that he should also insist that his comrades do not violate any of the rules prescribed for this purpose.

A great many diseases are due to germs, which are either little animals or little plants so very small that they can only be seen by aid of the microscope. All diseases caused by germs are "catching." All other diseases are not "catching."

There are only five ways of catching disease:

(a) Getting certain germs on the body by touching someone or something which has them on it. Thus, one may catch venereal diseases, smallpox, measles, scarlet fever, chicken pox, mumps, boils, body lice, ringworm, barber's itch, dhobie itch, and some other diseases. Wounds are infected in this manner.

(b) Breathing in certain germs which float in the air. In this way one may catch pneumonia, consumption, influenza, diphtheria, whooping cough, tonsillitis, spinal meningitis, measles, and certain other diseases.

(c) Taking certain germs in through the mouth in eating or drinking. Dysentery, cholera, typhoid fever, diarrhea, and intestinal worms may be caught in this manner.

(d) Having certain germs injected into the body by the bites of insects, such as mosquitoes, fleas, and bedbugs. Malaria, yellow fever, dengue fever, and bubonic plague may be caught in this way.

(e) Inheriting the germ from one's parents.

Persons may have these germs sometimes without apparently being sick with any disease. Such persons and persons who are sick with the diseases are a great source of danger to others about them. Germs which multiply in such persons are found in their urine and excretions from the bowels; in discharges from ulcers and abscesses; in the spit or particles coughed or

sneezed into the air; in the perspiration or scales from the skin; and in the blood sucked up by biting insects.

Those who have taken care of their health and who have not become weakened by bad habits, exposure, and fatigue are not only less liable to catch disease, but are more apt to recover when taken sick.

Knowing all these things, the soldier can understand the reasons for the following rules and how important it is that they should be carried out by each and every person:

Stay away from persons having "catching" diseases.

If you have any disease, don't try to cure it yourself, but go to the surgeon. Insist that other soldiers do likewise.

Association with lewd women is dangerous. It may result in disabling you for life. It is the cause of a disease (syphilis) which may be transmitted by a parent to his children. Soldiers with venereal diseases should not use basins or toilet articles used by others, as the germs of these diseases if gotten into the eye very often cause blindness. Likewise, if they use the same drinking cup used by others, they may give others the disease. They should promptly report their trouble to the surgeon, that they may receive the best medical advice and attention.

Cooked germs are dead and therefore harmless. Water, even when clear, may be alive with deadly germs. Therefore, when the conditions are such that the commanding officer orders all drinking water to be boiled, be careful to live up to this order.

Use the latrines and don't go elsewhere to relieve yourself. In open latrines cover your deposit with dirt, as it breeds flies and may also be full of germs.

Flies carry germs from one place to another. Therefore, see that your food and mess kit are protected from them.

All slops and scraps of food scattered about camp soon produce bad odors and draw flies. Therefore, do your part toward keeping the camp free from disease by carefully depositing such refuse in the pits or cans used for this purpose.

Urinate only in the latrines, or in the cans set out for this purpose, never on the ground around camp, because it not only causes bad smells, but urine sometimes contains the germs of "catching" diseases.

Soapy water thrown on the ground soon produces bad odors. Therefore, in camps of several days' duration, this water should be thrown in covered pits, or in cans used for this purpose.

As certain mosquitoes can transmit malaria and yellow fever, use your mosquito bar for this reason, as well as for personal comfort.

Keep your mouth clean by brushing your teeth once or twice a day. It helps to prevent the teeth from decaying. Decayed teeth cause toothache. They also lead one to swallow food without properly chewing it, and this leads to stomach troubles of various kinds. Food left around and between the teeth is bad for the teeth and forms good breeding places for germs.

Keep the skin clean. Through the pores of the skin the body gets rid of much waste and poisonous matter. Therefore, remove this and keep the pores open by bathing once every day, if possible. If water is scarce, rub the body over with a wet towel. If no water is at hand, take a dry rub. Wash, carefully, the arm pits, between the legs, and under the foreskin, as this will prevent chafing.

The skin protects the sensitive parts underneath from injury and helps to keep out germs. Therefore, when blisters are formed don't tear off the skin. Insert a needle under the skin a little distance back from the blister and push it through to the opposite side. Press out the liquid through the holes thus formed. Heat the needle red hot first, with a match or candle, to kill the germs.

When the skin is broken (in cuts and wounds) keep the opening covered with a bandage to keep out germs and dirt; otherwise the sore may fester. Puss is always caused by germs.

Take care of your feet. A soldier can not march with sore feet, and marching is the main part of a soldier's daily duty. The Germans treat sore feet as a military offense, as it is generally due to carelessness or neglect on the part of the soldier. Wash and dry the feet carefully at the end of every day's march. This removes the dirt and perspiration and makes the skin healthy. It soothes tired feet and greatly lessens the chance of sores and chafing. Don't wander about camp through the grass barefooted, as the skin may be scratched or the feet be bruised, or poisonous weeds may be encountered. If the skin is tender or the feet perspire freely, wash with warm salt water or alum water. For raw or chafed spots use foot powder, which can be obtained at the hospital. Grease, or soap, or foot powder applied to the foot or the stocking before starting on the march prevents rubbing. Cut the toenails square (fairly close in the middle, but leaving the sides somewhat

longer), as this prevents ingrowing nails. If corns or bunions or ingrowing nails give trouble, or any rawness or rubbing causes pain, go to the surgeon promptly for advice. Don't wait several days till you can no longer march. Don't wear stockings full of holes if you can possibly get others. Wear a clean pair every day, washing them every night if necessary. The light woolen stockings issued by the Government are probably the best to use even in summer. Should a hole or a seam in the stocking begin to cause rubbing, turn it inside out or change it to the other foot. Be careful in drawing shoes to get a good fit. Don't be so foolish or green as to start out to march wearing new shoes or the light shoes ordinarily used by civilians, or low shoes or patent-leather shoes. Keep the marching shoes well oiled to keep them soft and pliable. If they get full of sand on the march wash out the inside on reaching camp and then hang on a couple of pegs overnight to drain. They may feel cool and clammy in the morning, but they will be clean and soft. Never place the shoes near a fire or in the sun to dry as it makes them hard and stiff.

Keep your hair short. Long hair and a long beard in the field generally means a dirty head and a dirty face and favors skin diseases, lice, and dandruff.

Don't let any part of the body become chilled, as this very often is the direct cause of diarrhea, dysentery, pneumonia, rheumatism, and other diseases.

Wet clothes may be worn while marching or exercising without bad results, but there is great danger if one rests in wet clothing, as the body may become chilled.

Don't sit or lie or sleep directly on damp ground, as this is sure to chill the body.

When hot or perspiring or when wearing damp clothes, don't remain where a breeze can strike you. You are sure to become chilled.

Every day, if possible, hang your blanket and clothing out to air in the sun; shake or beat them with a small stick. Germs and vermin don't like this treatment, but damp, musty clothing suits them very well. Wash your shirts, underwear, and socks frequently. The danger of blood poisoning from a wound is greatly increased if the bullet passes through dirty clothes.

Ditch your tent as soon as you can, particularly a shelter tent, even if you camp for one night only. Otherwise a little rain may ruin a whole night's rest.

Always prepare your bed before dark. Level off the ground and scrape out a little hollow for your hips. Get some straw or dry grass, if possible. Green grass or branches from trees are better than nothing. Sleep on your poncho. This keeps the dampness from coming up from the ground and chilling the body. Every minute spent in making a good bed means about an hour's good rest later on.

Avoid the food and drink found for sale in the cheap stands about camp. The quality is generally bad, and it is often prepared in filthy places by very dirty persons.

The use of intoxicating liquor is particularly dangerous in the field. Its excessive use, even at long intervals, breaks down one's system. Drinking men are more apt to get sick and less liable to get well than are their more sober comrades. If alcohol is taken at all, it is best after the work of the day is over. It should never be taken when the body is exposed to severe cold, as it diminishes the resistance of the body. Hot tea or coffee is much preferable under these circumstances.

A FEW FIRST-AID RULES.

The bandages and dressings contained in the first-aid packet have been so treated as to destroy any germs thereon. Therefore, when dressing a wound be careful not to touch or handle that part of the dressing which is to be applied to the wound.

A sick or injured person should always be made to lie down on his back, if practicable, as this is the most comfortable position and all muscles may be relaxed.

All tight articles of clothing and equipment should be loosened so as not to interfere with breathing or the circulation of the blood. Belts, collars, and the trousers at the waist should be opened.

Don't let mere onlookers crowd about the patient. They prevent him from getting fresh air and also make him nervous and excited.

In case of injury the heart action is generally weak from shock, and the body, therefore, grows somewhat cold. So don't remove any more clothing than is necessary to expose the injury.

Cut or rip the clothing, but don't pull it. Try to disturb the patient as little as possible.

Don't touch a wound with your fingers or a handkerchief, or with anything else but the first-aid dressing. Don't wash the wound with water. Otherwise you may infect the wound.

Don't administer stimulants (whisky, brandy, wine, etc.) unless ordered to do so by a doctor. While in a few cases stimulants are of benefit, in a great many cases they do positive harm, especially where there has been any bleeding.

The heart may be considered as a pump, and the arteries as a rubber hose, which carry the blood from the heart to every part of the body. The veins are the hose which carry the blood back to the heart. Every wound bleeds some, but, unless a

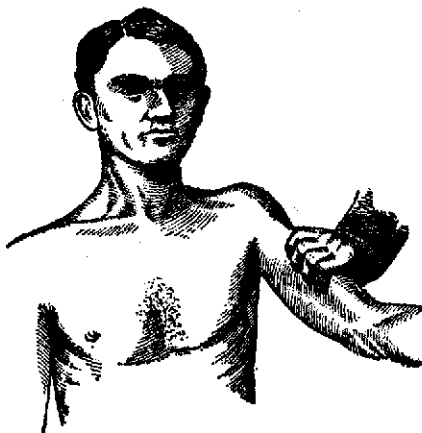


Figure 1.

large artery or a large vein is cut, the bleeding will stop after a short while if the patient is kept quiet and the first-aid dressing is bound over the wound so as to make pressure on it.

When a large artery is cut the blood gushes out in spurts every time the heart beats. In this case it is necessary to stop the flow of blood by pressing upon the hose somewhere between the heart and the leak.

If the leak is in the arm or hand, apply pressure as in figure 1.

If the leak is in the leg, apply pressure as in figure 2.

If the leak is in the shoulder or armpit, apply pressure as in figure 3.



Figure 2.

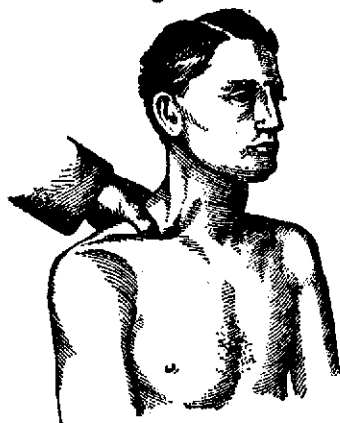


Figure 3.

The reason for this is that at the places indicated the arteries may be pressed against a bone more easily than at any other places.

Another way of applying pressure (by means of a tourniquet) is shown in figure 4. Place a pad of tightly rolled cloth or paper, or any suitable object, over the artery. Tie a bandage



Figure 4.—Improvised tourniquet.

loosely about the limb and then insert your bayonet, or a stick, and twist up the bandage until the pressure of the pad on the artery stops the leak. Twist the bandage slowly and stop as soon as the blood ceases to flow, in order not to bruise the flesh or muscles unnecessarily.

A tourniquet may cause pain and swelling of the limb, and if left on too long may cause the limb to die. Therefore, about

every half hour or so, loosen the bandage very carefully, but if the bleeding continues pressure must be applied again. In this case apply the pressure with the thumb for five or ten minutes, as this cuts off only the main artery and leaves some of the smaller arteries and the veins free to restore some of the circulation. When a tourniquet is painful, it is too tight and should be carefully loosened a little.

If the leg or arm is held upright, this also helps to reduce the bleeding in these parts, because the heart then has to pump the blood uphill.



Figure 5.



Figure 6.

A broken bone is called a fracture. The great danger in the case of a fracture is that the sharp, jagged edges of the bones may stick through the flesh and skin, or tear and bruise the arteries, veins, and muscles. If the skin is not broken, a fracture is not so serious, as no germs can get in. *Therefore never move a person with a broken bone until the fracture has been so fixed that the broken ends of the bone can not move.*

If the leg or arm is broken, straighten the limb gently, and, if necessary, pull upon the end firmly to get the bones in place.

Then bind the limb firmly to a splint to hold it in place. A

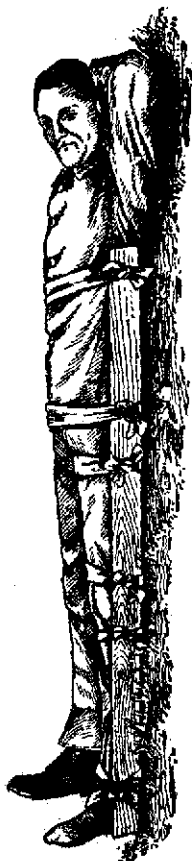


Figure 7.

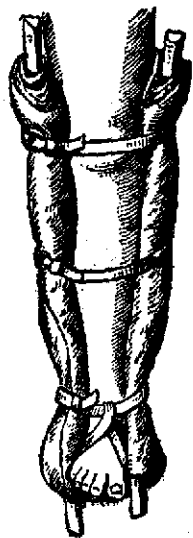


Figure 8.

splint may be made of any straight, stiff material—a shingle or

piece of board, a bayonet, a rifle, a straight branch of a tree, etc. Whatever material you use must be well padded on the side next to the limb. Be careful never to place the bandages over the fracture, but always above and below. (Figs. 5, 6, 7, 8.)

Many surgeons think that the method of binding a broken leg to the well one, and of binding the arm to the body, is the best plan in the field, as being the quickest and one that serves the immediate purpose.

With wounds about the body, the chest, and abdomen you must not meddle, except to protect them, when possible without much handling, with the materials of the packet.

Fainting, Shock, Heat Exhaustion.

The symptoms of fainting, shock, and heat exhaustion are very similar. The face is pale, the skin cool and moist, the pulse is weak, and generally the patient is unconscious. Keep the patient quiet, resting on his back, with his head low. Loosen the clothing, but keep the patient warm, and give stimulants (whisky, hot coffee, tea, etc.).

Sunstroke.

In the case of sunstroke the face is flushed, the skin is dry and very hot, and the pulse is full and strong. In this case place the patient in a cool spot, remove the clothing, and make every effort to lessen the heat in the body by cold applications to the head and surface generally. Do not, under any circumstances, give any stimulants or hot drinks.

Freezing and Frostbite.

The part frozen, which looks white or bluish white, and is cold, should be very slowly raised in temperature by brisk but careful rubbing in a cool place and never near a fire. Stimulants are to be given cautiously when the patient can swallow, and followed by small amounts of warm liquid nourishment. The object is to restore the circulation of the blood and the natural warmth gradually and not violently. Care and patience are necessary to do this.

Drowning.

Being under water for four or five minutes is generally fatal,



Figure 9.—First movement, inspiration.

but you should always make an effort to revive the apparently

drowned unless it is known that the body has been under water for a long time.

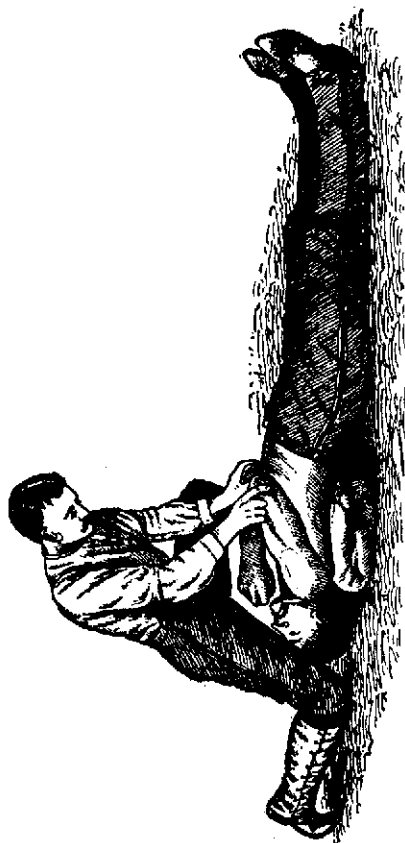


Figure 10.—Second movement, expiration.

Remove patient's coat and shirt; lay him on his face; clasp hands under his belly and raise him to drain water from lungs; clean out his mouth and nose; pull his tongue forward and hold

it with a dry handkerchief. To expand his chest, kneel at his head, grasp an arm just below the elbow with each hand; draw his arms outward and upward to sides of the head. (Fig. 9.)

To drive air from the chest bring patient's arms down along sides and front of chest, pressing on them. (Fig. 10.) Alternate these movements about fifteen times per minute until natural respiration begins, or for at least one hour. Occasionally hold ammonia to his nose and slap his chest with a cold, wet cloth. While these movements are being made, remove his lower garments and dry the skin, rubbing toward the body. As soon as patient is able to swallow give stimulants carefully and warm fluid nourishment.

INDEX.

	Page.
Advance guards.....	158
Advice to riflemen.....	41
Aiming device.....	26
Ammunition, field kit.....	16
Articles of War, governed by.....	13
Bathing, why necessary.....	168
Bayonet exercises.....	105
Calling shots, how done.....	33
Challenges by sentinels.....	134
Classification for Special Course C.....	40
Clothing, field kit.....	16
Clothing, care of.....	14
Combat.....	162
Commander of guard, certain duties of.....	122
Commands, kinds.....	47, 49
Conversation, courtesies in.....	11
Cooking, by individuals.....	18
Corporal of the guard, duties of.....	123
Countersigns.....	145
Courtesy, military, discussed.....	9
Definitions, Infantry Drill Regulations.....	43
Discipline, defined.....	9
Disease, discussed.....	166
Disobedience of orders.....	13
Distance:	
Between ranks.....	46
How measured.....	46
Drowning, how to treat.....	177
Elevation:	
Problems.....	36
Table of correction for.....	35

	Page.
Enlistment, oath of.....	7
Equipment, field.....	16
Expert riflemen, defined.....	41
Extended order:	
General principles.....	48
Intervals at.....	48
School of squad.....	93
Feet, care of.....	168
Field kit.....	16
Fire discipline.....	52
Firing, general remarks on.....	32
Firings.....	88
Firings, kinds of.....	50
First aid.....	170
First-class men, defined.....	40
Flags.....	146
Flinching.....	34
Fractures, care of.....	174
General orders of sentinels.....	131
General principles, Drill Regulations.....	46
Gun sling, use in firing.....	33
Health, care of.....	166
Insignia, of rank for officers.....	13
Inspection of arms.....	88
Interval:	
Between files.....	46
Defined.....	44
How measured.....	46
Kit:	
Composition of.....	16
Field.....	16
Kinds of.....	16
Service.....	16
Surplus.....	16
Loadings.....	52, 88
Loyalty, discussed.....	8
Manual of arms:	
General rules.....	65
Movements of.....	66
Marches, discussed.....	147
Marksmen, defined.....	41

	Page.
Messages, by patrols.....	151
Messages, form used.....	12
Musician of the guard, duties of.....	128
Normal attack.....	96
Oath, of enlistment.....	7
Obedience, discussed.....	7
Offenses, most commonly committed.....	13
Orderly:	
Delivery of messages.....	12
Duties of.....	129
Orders:	
Disobedience of.....	13
Obedience to.....	7
Outposts.....	160
Paroles.....	145
Patrols:	
Discussed.....	149
Messages sent by.....	151
Positions, for firing:	
Lying.....	32, 86, 90
Kneeling.....	32, 86, 90
Sitting.....	32
Standing.....	31, 89
Prisoners, not to salute.....	143
Problems:	
Corrections for windage and elevation.....	36
Setting rear sight.....	24, 26
Property, selling, pawning, etc.....	14
Rank, of officers and noncommissioned officers.....	12
Rations:	
Cooking by individuals.....	18
Defined.....	17
Field kit.....	17
Kinds.....	17
Rear guards.....	158
Regulations governing soldiers.....	13
Reliefs of guard, how posted.....	124
Rifle:	
Book, description of.....	24
Care of.....	22
Described.....	21

Rifle—Continued.	Page.
Firing.....	24
General rules for using.....	63
Plate of.....	22
Precautions in handling.....	23
Rosters, use of.....	121
Salutes:	
At retreat.....	10
By privates out of ranks.....	10
From guards.....	139
From sentinels.....	137
Rifle.....	73
To colors and standards.....	10
To officers.....	10
With hand.....	56
School of soldier.....	54
Sentinels:	
Duties of.....	130
On outposts.....	161
Orders for.....	131
Sergeant of the guard, certain duties of.....	122
Service kit.....	16
Setting-up exercises.....	57
Sharpshooters, defined.....	41
Sighting drills.....	28
Sights, kinds.....	26
Signals, use of.....	49
Skirmishers, instruction of.....	74
Sling, use of, in firing.....	33
Special Course C.....	37
Classification under.....	40
Special orders:	
Relating to prisoners.....	143
Sentinels.....	141
Splints, described.....	174
Squad:	
In combat.....	162
School of the.....	76
Stack arms, described.....	85
Surplus kit.....	16

Targets:	Page.
Diagrams of.....	36, 37
Ranges at which used	37
Tent pitching.....	98
Tourniquet, described.....	173
Trigger squeeze.....	33
Uniforms:	
Care of.....	15
Kinds of.....	14
Use of.....	15
Wind:	
Corrections for.....	34, 35
Direction of.....	34
Effects	34
Windage:	
Point of, defined.....	25
Problems in.....	26
Rule for.....	35
Table of.....	35
Wounds, first aid for.....	170